SEMI-ANNUAL COMPLIANCE REPORT JANUARY THROUGH JUNE 2016

OPERATION AND MAINTENANCE OF THE GROUNDWATER TREATMENT PLANT SOUTH JERSEY CLOTHING COMPANY/ GARDEN STATE CLEANERS SUPERFUND SITE MINOTOLA, NEW JERSEY



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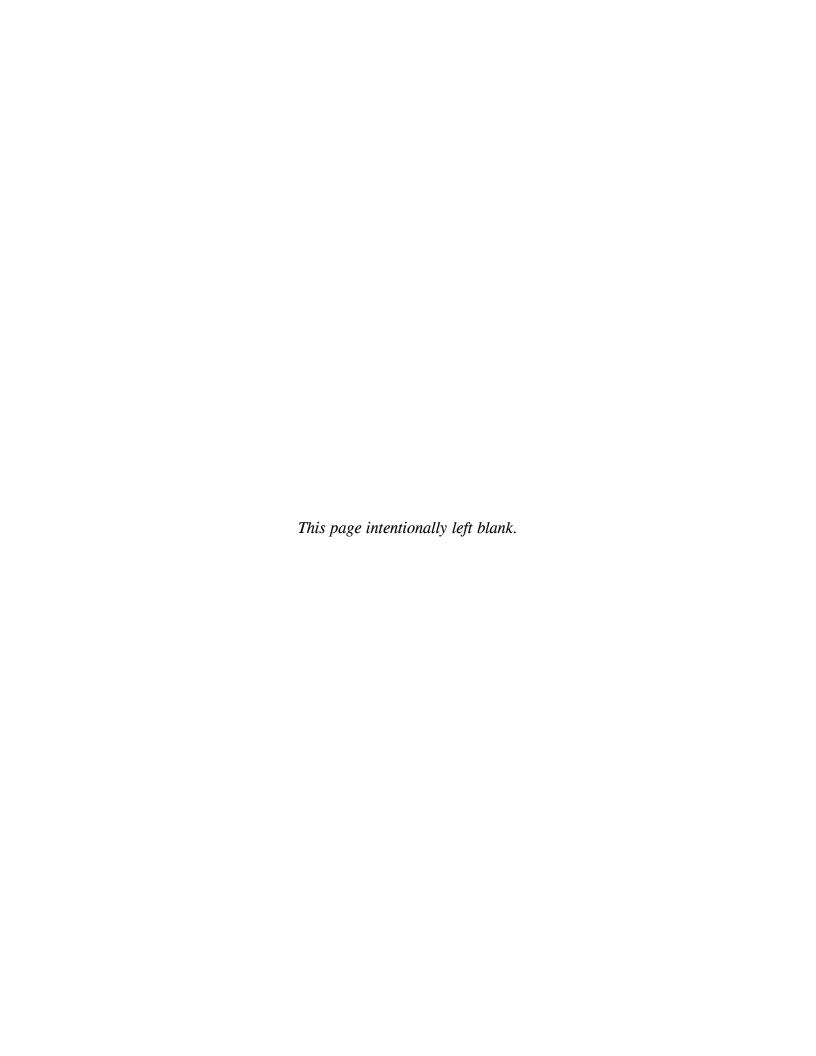
U.S. Army Corps of Engineers Philadelphia District

Contract No. W912DQ-10-D-3011 Delivery Order CF02

November 2016







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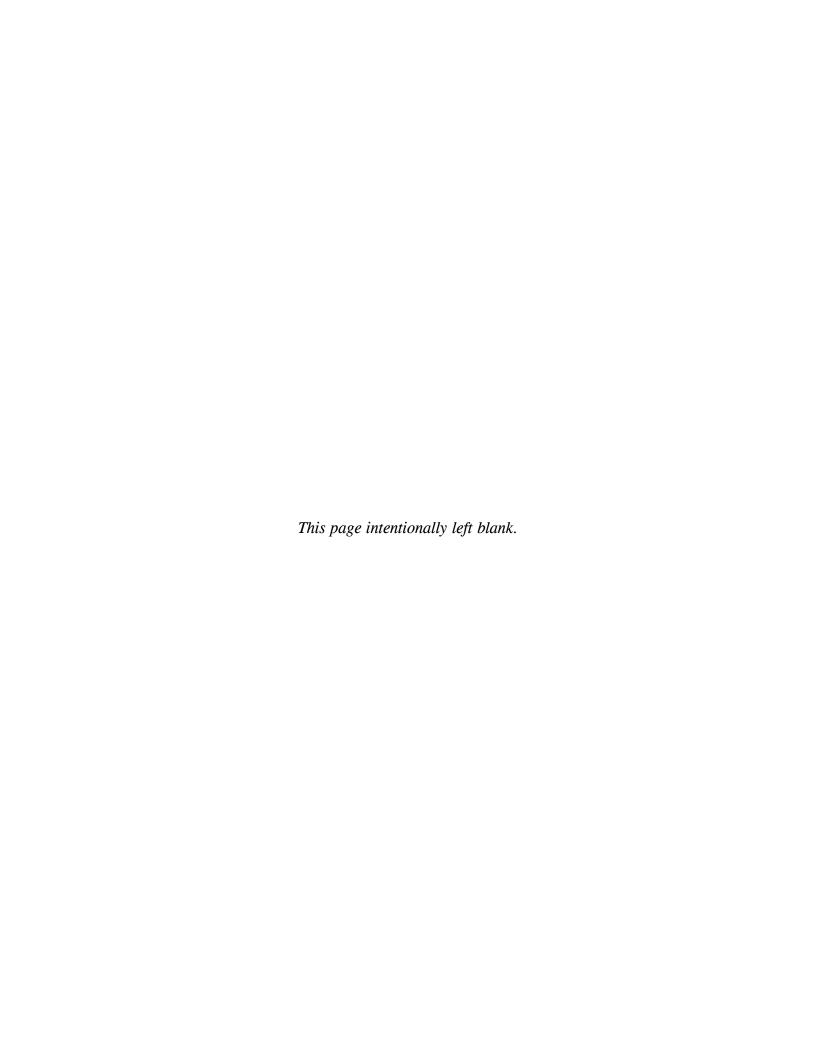


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November 2016



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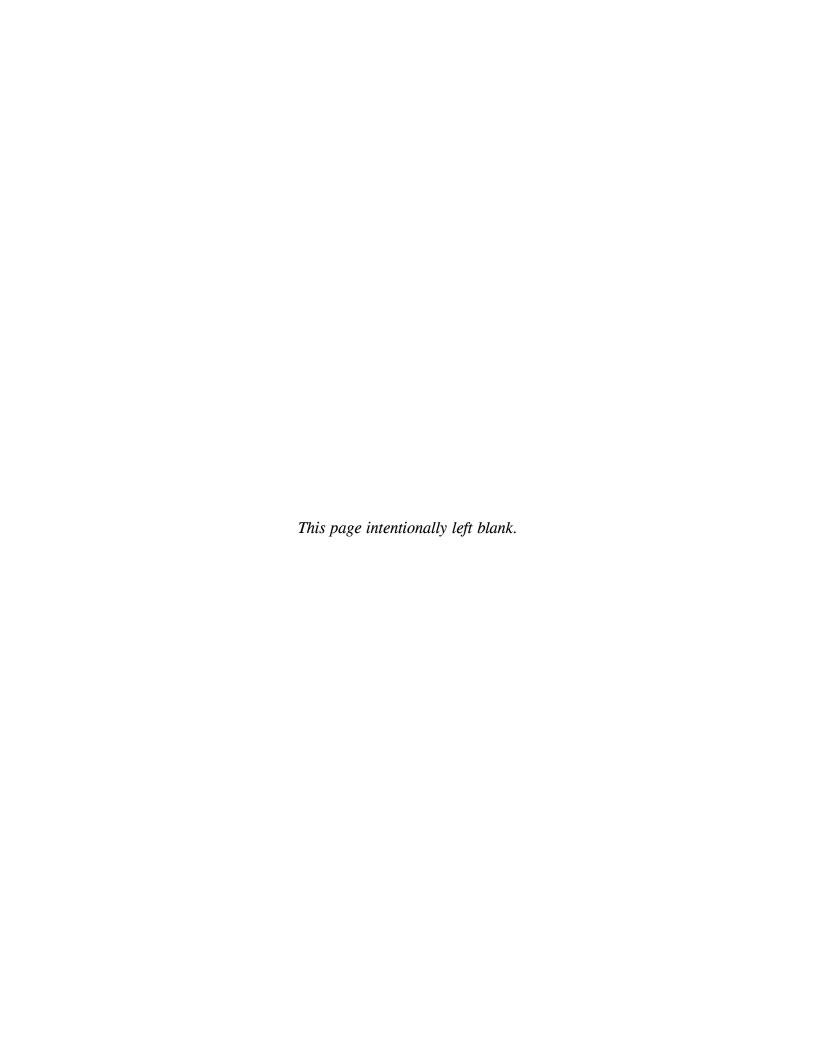


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LIST OF ACRONYMS AND ABBREVIATIONS

amsl above mean sea level

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

cis-1,2-DCE cis-1,2-dichloroethene COC contaminants of concern

DGW discharge to groundwater

EDD electronic data deliverables

EQ equalization

ft feet

ft/ft feet per foot

GETS groundwater extraction treatment system

gpm gallons per minute GSC Garden State Cleaners

GWTP groundwater treatment plant

HGL HydroGeoLogic, Inc.

LPGAC liquid-phase granular activated carbon

LTRA long-term response action

 μ g/L micrograms per liter

NJAC New Jersey Administrative Code

NJDEP New Jersey Department of Environmental Protection NJPDES New Jersey Pollutant Discharge Elimination System

% percent

PCE tetrachloroethene

PEV Permit Equivalent Update
PLC programmable logic controller

QA quality assurance QC quality control

ROD Record of Decision

Sevenson Environmental Services, Inc.

SJCC South Jersey Clothing Company

TCE trichloroethene

TDS total dissolved solids

TET treated effluent holding tank

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LIST OF ACRONYMS AND ABBREVIATIONS

TSS total suspended solids

UFP-QAPP Uniform Federal Policy-Quality Assurance Project Plan

USACE U.S. Army Corps of Engineers

USEPA U.S. Environmental Protection Agency

VOC volatile organic compound

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1.0 INTRODUCTION

HydroGeoLogic, Inc. (HGL) has prepared this Semi-Annual Compliance Report for the U.S. Army Corps of Engineers (USACE)-Philadelphia District under Contract W912DQ-10-D-3011, Delivery Order CF02. The reporting period for this report is January 2016 through June 2016. The purpose of this report is to evaluate the compliance status of the South Jersey Clothing Company (SJCC)/Garden State Cleaners (GSC) groundwater extraction treatment system (GETS) with respect to the New Jersey Pollutant Discharge Elimination System (NJPDES) Discharge to Groundwater (DGW) Permit Equivalent (New Jersey Department of Environmental Protection [NJDEP], 1997). The Permit Equivalent was originally issued in April 1997, and updated in December 2005. The GETS is currently operating under the conditions of the Permit Equivalent Update (PEV). HGL has prepared this report in accordance with Section VIII of the PEV.

HGL began operations of the treatment plant on March 9, 2013. The evaluation of compliance status is based on data and documents including monthly operations reports, electronic data deliverables (EDD) for groundwater and plant sampling events, groundwater elevation data, field sampling logs, and well construction information. In addition, HGL reviewed the NJPDES-DGW PEV (NJDEP, 2005); the *Project-Specific Uniform Federal Policy Quality Assurance Project Plan, Operation and Maintenance of the Groundwater Treatment Plant (UFP-QAPP)* (HGL, 2015); the June 2016 UFP-QAPP Addendum (HGL, 2016b); and the *Operation and Maintenance Manual* (Sevenson Environmental Services, Inc. [Sevenson], 2012).

1.1 SITE DESCRIPTION AND HISTORY

The former SJCC is a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site located in the town of Minotola, Buena Borough, Atlantic County, New Jersey, near the intersection of Central and Atlantic Avenues. The GSC Superfund Site is located approximately 500 feet (ft) south of SJCC as shown in Figure 1. Cleanup and monitoring of the SJCC and GSC sites were addressed jointly by the U.S. Environmental Protection Agency (USEPA) due to similar contamination and proximity to one another. USEPA Region 2 is the lead agency for ongoing long-term response actions (LTRA) that are performed at the SJCC/GSC site; the USACE-Philadelphia District provides oversight of the response actions and ensures that quality assurance (QA) goals are met.

The SJCC/GSC site is located upgradient to a suburban area with some light industry, and approximately 2,000 ft south of the site is the Cleary Junior High School. Wells within 3 miles of the site supply drinking water to approximately 9,000 people. No surface water features are situated in the immediate vicinity of the site, and the surrounding area encompasses over 3,800 acres of prime irrigated agricultural area. The GETS is housed on site in a large pre-engineered building. Extraction wells, injection wells, and an injection trench are part of the site system.

The GETS is an automated treatment facility designed to extract approximately 500 gallons per minute (gpm) of water from groundwater extraction wells. Contaminated groundwater passes through two 20,000-pound liquid-phase granular activated carbon (LPGAC) units connected in a series arrangement. The process water is then treated with sodium hypochlorite and the system effluent is returned to the aquifer via several reinjection wells located upgradient of the treatment system building. Although the treatment system includes several solids removal components, the influent metals concentrations, namely iron, were lower than anticipated in the system design. Therefore, the solids removal portion of the system has remained in bypass mode for several years.

The site's current primary contaminants of concern (COC) are volatile organic compounds (VOC), specifically trichloroethene (TCE) and tetrachloroethene (PCE), in the air and aqueous media. The locations of the SJCC/GSC groundwater treatment plant (GWTP), extraction and monitoring wells, and the injection well field are shown in Figure 2.

1.2 NJPDES-DGW PERMIT EQUIVALENT AND SAMPLING SCHEDULE

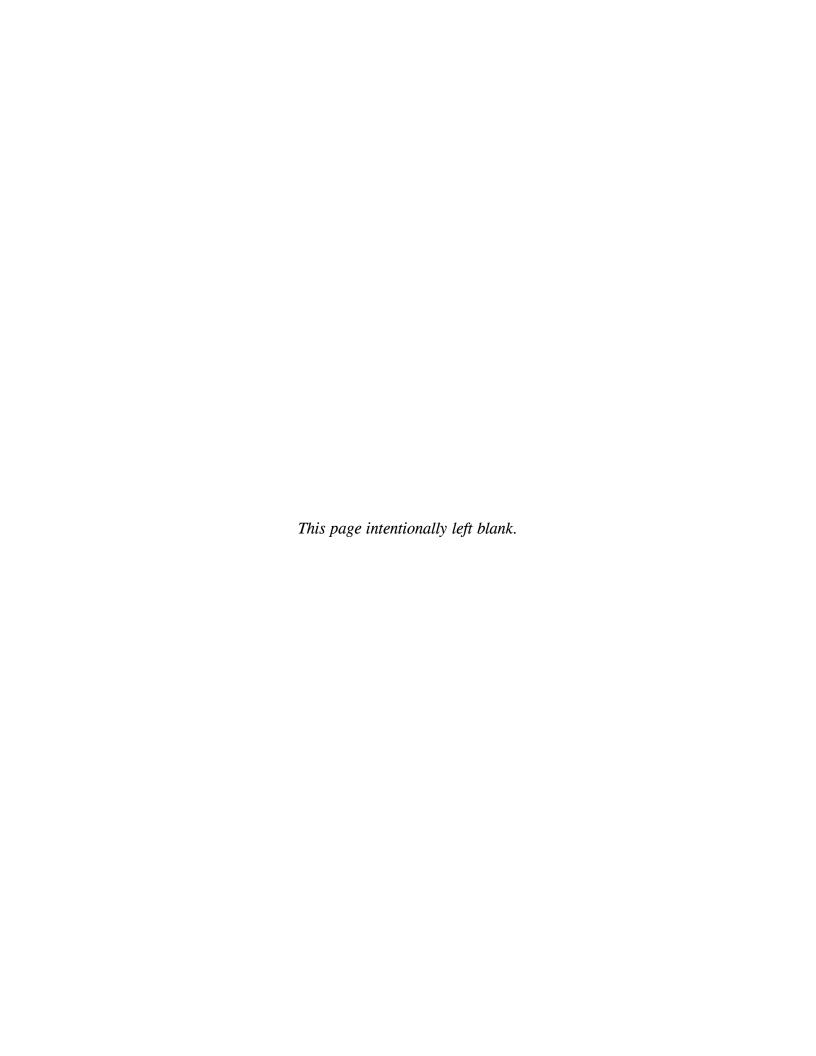
The SJCC/GSC GETS operates under the NJPDES-DGW PEV, which was issued on December The NJPDES/DGW Permit Equivalency requires a semi-annual submittal 28, 2005. summarizing the quarterly groundwater monitoring well water level data and semi-annual COC concentrations; a GETS monthly effluent sampling results table; and a comparison of the sampling results to the permit discharge limits. The PEV authorizes discharge from the pumpand-treat process into the aquifer through injection wells upgradient of the contaminated plume for a period of up to 30 years from the first date of discharge (April 1999). To verify compliance with the requirements of the NJPDES/DGW Permit Equivalency and compare the results to the NJDEP Groundwater Quality Standards New Jersey Administrative Code (NJAC) 7:9C and the 2010 USEPA Record of Decision (ROD), groundwater monitoring samples are collected from 86 existing locations (19 extraction wells, 58 monitoring wells, 9 residential wells) on a semiannual or annual basis. Groundwater samples are collected from eight monitoring wells on a biennial basis. Influent, intermediate, and effluent process liquid samples are collected from the pump and treat system to monitor plant performance and refine operating conditions, as necessary, to optimize performance. Samples are analyzed to verify compliance with the requirements of the NJPDES/DGW Permit Equivalency and compared to the NJDEP Groundwater Quality Standards NJAC 7:9C, as well as the 2010 USEPA ROD.

The original Permit Equivalent specifies effluent limits, influent and effluent monitoring requirements, and groundwater monitoring requirements. The effluent discharge criteria for the original Permit Equivalent are shown on Table 1. The semi-annual sampling and water level schedule are presented in Appendix A.

2.0 GROUNDWATER TREATMENT SYSTEM PERFORMANCE

From January to June 2016, the SJCC/GSC GETS operated on a nearly continuous basis, with approximately 48.11 hours of downtime. Details on the downtime experienced during this 6-month reporting period are presented in Table 2.

Review of the data included in the monthly operations reports prepared by HGL reveals that an estimated total of 96.1 million gallons of groundwater were treated during this 6-month period, resulting in the removal of approximately 3.4 pounds of PCE and 21.24 pounds of TCE. The total groundwater treated and PCE/TCE removal rates for each month of the reporting period are summarized in Table 3. As shown in Table 4, mass removal efficiencies for this reporting period were 100 percent (%) for both PCE and TCE.



3.0 GROUNDWATER TREATMENT SYSTEM SAMPLING

Water treatment system sampling is conducted during the operation of the plant to monitor plant treatment efficiency; determine whether carbon breakthrough has occurred; and verify that discharge parameters are met. Water treatment system sampling is conducted monthly and consists of laboratory analysis of samples collected from the equalization (EQ) tank after the liquid-phase carbon adsorption unit (ALPC1 or ALPC2), and from the treated effluent holding tank (TET). In addition, an aqueous sample is generally collected on a weekly basis from a point after one of the ALPC units. This liquid phase mid-carbon sample point is sampled for VOCs, per contract specifications.

The two ALPC units alternate as either lead or lag depending on carbon condition. That is, the lead unit always contains carbon that is more expended than the carbon in the lag unit. When breakthrough has been identified at the discharge side of the lead ALPC unit, the carbon in the lead unit is changed out. At this time, the unit with the partially spent carbon becomes the lead unit and the unit with the fresh carbon becomes the lag unit. Thus, the lead and lag units change on an alternating basis. As a result, the weekly sample collected from either the discharge side of the lead APLC unit or the discharge side of the lag unit will alternately be identified as APLC1 or APLC2, respectively.

Plant efficiency samples are collected at the following five locations: 1) after the clarifier, 2) after the sand filters, 3) after the first air stripper, 4) after the second air stripper, and 5) in between the liquid phase carbon units. However, because the plant operated primarily in the bypass mode, efficiency samples were collected only at the carbon units.

For the reporting period (January to June 2016), the treatment plant operated in both normal and bypass mode. The treatment plant operated in bypass mode with the exception of periodic, short term events when the treatment plant was operated in normal mode to ensure that bypassed system components continue to be functional. Bypass mode diverts the influent flow from the EQ tank directly into the liquid-phase carbon vessels, thus bypassing the other plant equipment (i.e., floc tank, parallel plate separator, sand filter, and air strippers). The sampling requirements and schedule are summarized in Appendix A.

A summary of the PCE and TCE results from the EQ tank and TET is provided in Table 4, while all of the monthly GETS sample results for the first half of the 2016 reporting period are summarized on Table 5. As shown on Table 5, groundwater entering the plant in the EQ tank had PCE and TCE concentrations in excess of the discharge permit limits. Water leaving the plant from the TET met the discharge limits for PCE and TCE. All discharge limits were met during the reporting period. Groundwater samples were analyzed for VOCs (USEPA Method 8260B); iron and manganese (USEPA Method 6010C); total dissolved solids (TDS) (Method SM 2540 C); total suspended solids (TSS) (Method SM 2540 D); and pH (Method SM 4500 H B). At the request of USACE and USEPA, the GETS process water was sampled for 1,4-dioxane in June 2016. 1,4-dioxane was not detected in the influent (EQ) or the effluent (TET) water.

3.1 PUMPING RATES

3.1.1 Extraction Wells

Individual extraction well pumping rates are presented in Table 6. Semi-annual daily average pumping rates from the active extraction wells ranged from approximately 2.8 gpm at EW-15 to 96.1 gpm at EW-12A. Extraction wells 2-7, 10, 12, and 14-17 were off line for a majority of the reporting period as groundwater from these wells contained either non-detectable or only very low concentrations of COCs. These wells may be exercised periodically and/or used as required to balance flow through the plant.

Extraction Wells EWS-1, EWI-8, EWI-13, and EWI-9 have been mechanically and electrically disconnected and are permanently off line. The control and power wiring for extraction wells EWS-1, EWI-8, EWI-13, and EWI-9 have been used for EW-20, EW-16, EW-12A, and EW-21, respectively. Extraction wells EWS-1 and EWI-8 are now low-flow groundwater sampling locations.

As shown in Table 6, the total extraction system flow rate, as recorded by the individual extraction well totalizers, averaged approximately 347 gpm over the reporting period. The total influent flow rate, as recorded by the treatment plant totalizer and listed on Table 7, averaged 366.7 gpm during the reporting period and is considered to be more accurate than the sum of the individual wells. Extraction flows decreased during the previous reporting period after USACE directed that flow from EW-21 be throttled down and that EW-17 be shut down to reduce pumping and treating of groundwater with trace VOCs.

3.1.2 Injection Wells

Individual injection well flow rates are presented in Table 8. Injection wells IW-8, IW-9, IW-10, and IW-13 through 24, as well as the injection trench, were on line throughout the entire reporting period. Semi-annual daily average flow rates for the active injection wells ranged from 11.2 gpm at IW-13 to 24.1 gpm at IW-8.

Injection wells IW-1 through IW-7, IW-11, and IW-12 were off line for the entire reporting period and will remain off line indefinitely due to various problems (e.g., the well not taking water and/or water rising to the surface).

As shown in Table 8, the total system injection flow rate, as recorded by the individual injection well totalizers, averaged approximately 279.7 gpm over the reporting period. The total injection flow rate, as recorded by the treatment plant totalizer and listed on Table 7, averaged 363.3 gpm during the reporting period and is considered to be more accurate than the sum of the individual wells. Additionally, information on the monthly operational performance of the injection wells is provided in Table 8.

4.0 GROUNDWATER SAMPLING

In 2005, the groundwater sampling schedule was modified, with USEPA approval, and the revised schedule was implemented. The sampling schedule is detailed in Table A-1, and is included in Appendix A. Table A-1 indicates that annual groundwater sampling was conducted at the site in April 2016, and also identifies the wells that were sampled during each sampling event.

All of the wells listed in Table A-1 were sampled during the April 2016 annual sampling event. Observation wells OW-2, OW-3, and OW-4 were only sampled for chloride to monitor for any inadvertent effects on water quality related to the chlorination of the treated effluent prior to injection.

The laboratory analytical results for the April 2016 sampling event are summarized in Table 9. Figure 2 shows the location of the north-south (A-A") and west-east (B-B') transects. Contaminant iso-concentration maps for the sampling event are presented in Figures 3 through 5. Cross-sections along the two transects for the sampling event are presented on Figures 6 and 7. Results for each contaminant of interest are discussed below.

4.1 TETRACHLOROETHENE

The PCE iso-concentration map for the April 2016 sampling event is presented on Figure 3. As shown on Figure 3, the highest PCE concentration (60 micrograms per liter $[\mu g/L]$) was detected in monitoring well OW-40, located approximately 1,800 ft south of Cleary Junior High School.

Elevated PCE concentrations in the area east of Central Avenue extended from observation well OW-22 (located on Martinelli Avenue) to residential well R-1731 (located approximately 500 ft north of the intersection of Vine Road with Central Avenue). Although residential well R-2960 (located just north of Vine Road and west of Central Avenue) could not be sampled during the April 2016 event, low levels of PCE have previously been detected at this well in other historical sampling events.

The north-south cross section (A-A" on Figure 6) shows PCE concentrations of 9 μ g/L at well NMW-1S (at approximately 90 ft above mean sea level [amsl]) in the upgradient direction. PCE was detected in the next nearest downgradient well sampled in April 2016 (EW-20) at a concentration of 11 μ g/L. PCE was next detected at the downgradient well SJCC-6 at a concentration of 10 μ g/L (at approximately 90 ft amsl). PCE was also detected at downgradient wells EW-17 (12 μ g/L); EW-16, (1.5 μ g/L); OW-22 (5.6 μ g/L); EP-6I (1.8 μ g/L); OW-23 (8.2 μ g/L); OW-27 (12 μ g/L); OW-28 (8.0 μ g/L); and EW-12A (3.3 μ g/L). The highest concentration of PCE (60 μ g/L) was detected at OW-40. As seen on Figure 3, the next nearest downgradient wells south of EWI-12A that had detectable PCE concentrations within the PCE plume east of Central Avenue are: OW-30, R-108, EW-18, OW-40, OW-19D, OW-35I, OW-35D, and R-1731. These wells exhibited PCE concentrations of 4.9, 6.1, 12, 60, 1.1, 4.2, 4.0, and 2.2. μ g/L in April 2016.

The west-east cross-section (B-B' on Figure 7) shows that PCE was detected at wells OW-28 (8.0 μ g/L); OW-27 (12 μ g/L); and OW-23 (8.2 μ g/L) during April 2016. Observation wells OW-34, OW-37, and OW-38 did not contain PCE at a concentration above the method quantitation limit.

4.2 TRICHLOROETHENE

The TCE iso-concentration map for the April 2016 sampling event is presented on Figure 4. The highest concentration of TCE was detected in extraction well EW-20 (910 D μ g/L), which is located directly south of the GWTP. The laboratory qualifier D indicates the result was obtained using a dilution. This concentration is higher than recent sampling results for this well, which have ranged from 61 to 227 μ g/L since July 2010. TCE was also detected in monitoring well NMW-1S, just west of the GWTP, at a concentration of 200 D μ g/L. Historically, elevated TCE concentrations east of Central Avenue have extended from extraction well EW-16 and observation well OW-22, which are located near the intersection of Martinelli Avenue and Central Avenue; and, southward to observation well OW-40, which is located on the west side of Central Avenue south of the intersection with Louis Drive. Observation well OW-22 had a TCE concentration of 4.4 μ g/L, while extraction well EW-16 had a TCE concentration of 5.9 during April 2016. It should be noted that the TCE in observation well OW-30, located in the downgradient portion of the TCE plume on Louis Drive, has shown steadily decreasing concentrations since extraction well EW-18 was brought online; decreasing from 1,400 µg/L (October-November 2008) to an estimated value of 0.80 μ g/L in April 2014. The concentration rose to 13 μ g/L in April 2015, and fell again to 4.3 μ g/L in October 2015. It remained relatively steady at 4.1 μ g/L in April 2016.

The north-south cross-section (A-A" on Figure 6) shows that TCE was detected at extraction well NMW-1S (at approximately 90 ft amsl) in the upgradient direction, at a concentration of 200 D μ g/L. TCE was detected in the next nearest downgradient well, EW-20, at a concentration of 910 D μ g/L. TCE was also detected in downgradient well EW-17 (at approximately 80 ft amsl), located approximately 600 ft south of well EW-20 at a concentration of 6.2 μ g/L. This cross section also illustrates the increasing TCE concentrations in the vicinity of Cleary School and to the southeast of the school, with concentrations ranging from 2.6 to 22 μ g/L. The TCE concentration at deep extraction well EW-12A (22 μ g/L), located on the north side of Wheat Road, was the ninth result below 100 μ g/L since the last half 2011 sampling event.

The TCE concentration and distribution in wells located along cross section A'-A" on Figure 6 shows elevated levels at EW-18 (44 μ g/L). TCE was detected at monitoring well OW-32 at a concentration of 4.4 μ g/L. The other wells located along this cross section had TCE concentrations ranging from non-detect (<1.0 μ g/L at OW-33 and OW-35I) to 44 μ g/L (EW-18).

The west-east cross section (B-B' on Figure 7) shows that TCE is most concentrated at monitoring wells OW-23 (22 μ g/L). The next highest concentration is 9.0 μ g/L at well OW-28, located approximately 375 ft southwest of OW-23.

4.3 CIS-1,2-DICHLOROETHENE

The highest detection of cis-1,2-dichloroethene (cis-1,2-DCE) was 4.1 μ g/L in the duplicate sample of monitoring well NMW-1S, located approximately 100 ft west of the GWTP. Four other wells (OW-40, SJCC-6, EW-17, and EW-20) had concentrations of cis-1,2-DCE higher than 1 μ g/L, with concentrations of 1.2, 1.4, 1.7, and 1.5 μ g/L, respectively.

4.4 TOTAL VOLATILE ORGANIC COMPOUNDS

The total VOC iso-concentration map for the April 2016 groundwater sampling event is presented on Figure 5. Elevated VOC concentrations are primarily found in two areas: east of Central Avenue between Martinelli Avenue and Louis Drive, and immediately south and west of the treatment plant.

TCE and PCE are the major contributors to the total VOC concentrations; cis-1,2-DCE, 1,1,1-Trichloroethane, and 1,1-Dichloroethane are minor contributors.

Benzene, chloroform, bromoform, and methyl-tert-butyl ether were also detected during the April 2016 sampling event at some wells. Concentrations of these compounds are commonly detected in some of the semi-annual sampling events. The results for acetone, benzene, chloroform, bromoform, dibromochloromethane, and methyl-tert-butyl ether were not included in the total VOC concentration calculation as these either are not site COCs or are assumed to be laboratory artifacts or anomalous results. Analytes not included in the calculation are noted in Table 9 with an asterisk.

4.5 QUALITY ASSURANCE/QUALITY CONTROL SAMPLING

QA/quality control (QC) samples were collected and analyzed as a check of field measurements and to verify the contract laboratory's performance on chemical samples. As detailed in Appendix A of the UFP-QAPP (HGL, 2015), QA/QC samples are to be collected at the following frequencies per analysis.

VOCs:

- Field duplicates: four duplicates for the annual event (for monitoring well and recovery wells only, not residential wells).
- Equipment rinsate blanks: four equipment blanks for the annual event.
- Trip blanks: one per cooler containing VOC sample vials.

Metals/TDS/TSS/Chloride:

- Field duplicates: one duplicate for the annual event (for monitoring well and recovery wells only, not residential wells).
- Equipment rinsate blanks: one equipment blank for the annual event.

During the April 2016 groundwater sampling event, the frequency requirements for QA/QC samples were met for the trip blanks, equipment rinsate blanks, and field duplicates. QA/QC samples for the April 2016 sampling event are presented in Table 10. A total of 67 monitoring wells, 19 extraction wells, and 9 residential wells were sampled during the April 2016 sampling event. The total number of samples locations differs from the plan total due to access issues; three residential wells (R1601, R1615, and R2960) were not sampled due to accessibility issues, including a vacant house with no electricity, and disconnected piping with no sample access. Specific wells and their access issues are listed in Appendix A-1 table. A total of five field duplicate samples are required to be in accordance with the QAPP. Five field duplicates were collected in April 2016. The duplicate samples were analyzed for the full VOC analysis and/or other analyses. All field duplicates were in good agreement with the results for the associated field sample.

During this reporting period, VOC analytes were not detected in any groundwater rinsate blanks, as shown in Table 10.

During the annual sampling event in April 2016, a limited list of VOCs, rather than the extended list specified in the QAPP, was listed on four chain of custody forms. The main COCs, including TCE, PCE, cis-1,2-DCE, and other primary VOCs were included in the analysis. This affected 29 monitoring wells (SJCC1, SJCC2, SJCC5, SJCC8, SJCC11, OW-45, OW-44, NMW-1S, DMW-1I, OW-35I, OW-35D, DMW-2D, OW-32, OW-19I, OW-33, OW-19D, EP6I, DMW-5D, OW-28, OW-27, OW-37, OW-26, OW-21, OW-16I, OW-16D, OW-30, EP13I, OW-17, and OW-14). During future sampling events, each chain of custody will be examined to ensure that the extended list of VOCs is used. The complete list of VOCs was later obtained from the laboratory and is now included in the report.

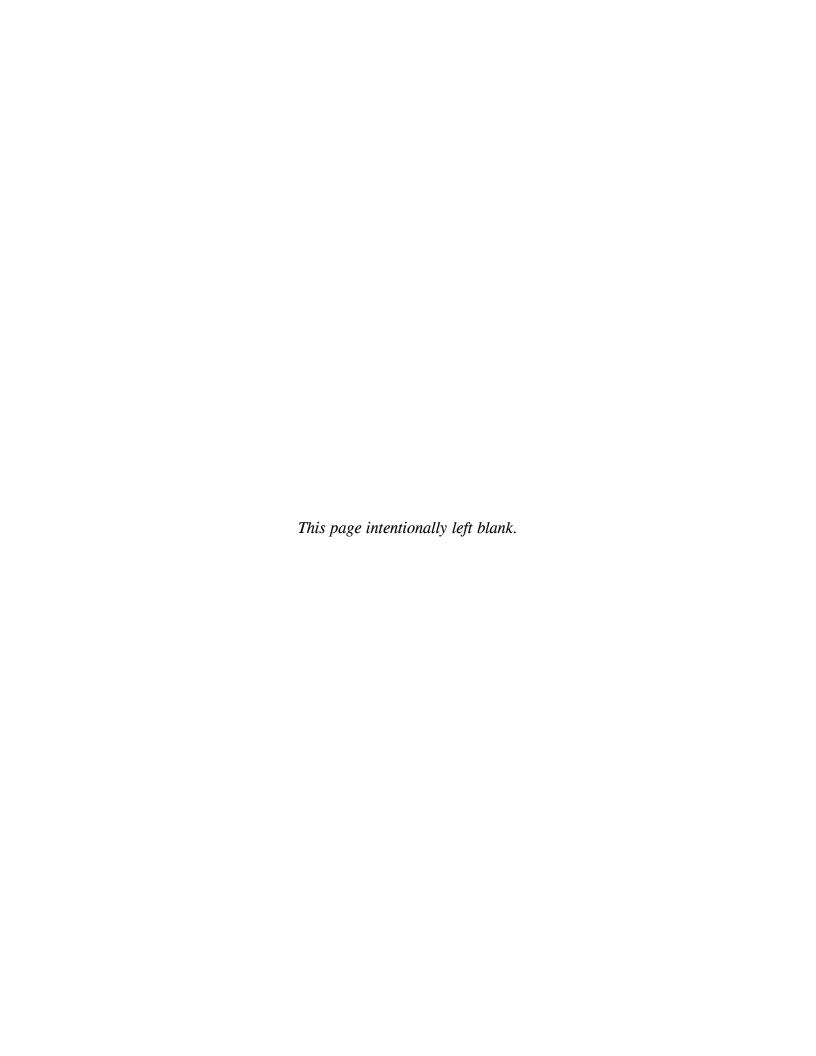
5.0 HYDROGEOLOGIC ASSESSMENT

The depth to groundwater for 77 monitoring wells and 20 extraction wells was measured under pumping conditions on May 25, 2016, and non-pumping conditions on May 26, 2016. Only active extraction wells were used for monitoring the groundwater level measurements under pumping conditions. All of the active extraction wells were then turned off the night before collecting the groundwater level measurements under non-pumping conditions. Groundwater elevations for the monitoring events conducted on May 25-26, 2016, are presented in Table 11 for the monitoring wells and Table 12 for the extraction wells. The schedule for depth-to-water measurements is shown in Table A-2 in Appendix A.

Based on the historical analysis of the groundwater flow, there are three groundwater flow regimes at the site, referred to as "shallow," "intermediate," and "deep." This does not mean separate and unconnected flow systems; rather flow systems that display different characteristics at different depths and locations on the site. For the purposes of this preliminary analysis, wells were identified as shallow (less than 70 ft below grade); intermediate (70 to 130 ft below grade); and deep (greater than 130 ft below grade). The screened interval for each monitoring well is included on Table 11.

Three groundwater contour maps representing the shallow, intermediate, and deep flow regimes were prepared for the May 2016 groundwater monitoring event (Figures 8, 9, and 10). As shown on Figures 8 through 10, based on the May 2016 measurements, groundwater flows in a generally southernly direction with an average horizontal hydraulic gradient of approximately 0.0013 feet per foot (ft/ft) in the shallow zone (measured between OW-104 and EP-7S); 0.0014 ft/ft in the intermediate zone (measured between OW-4 and OW-35I); and 0.0018 ft/ft in the deep zone (measured between DMW-2D and OW-35D). This direction and gradient of flow are consistent with previous conditions determined for the site.

The groundwater elevations for the pumping extraction wells were included in the contouring, while the groundwater elevations for the non-pumping extraction wells were not included in the contouring shown on Figures 8 through 10. These figures show the drawdown and inferred capture zones established by the extraction wells. The map scale for these figures does not allow representation of all of the contour lines in the areas of drawdown near the extraction wells, and the drawdown is illustrated by the closed contours containing hachures indicating further drawdown is present.



6.0 COMPLIANCE STATUS

6.1 GROUNDWATER TREATMENT SYSTEM PERFORMANCE

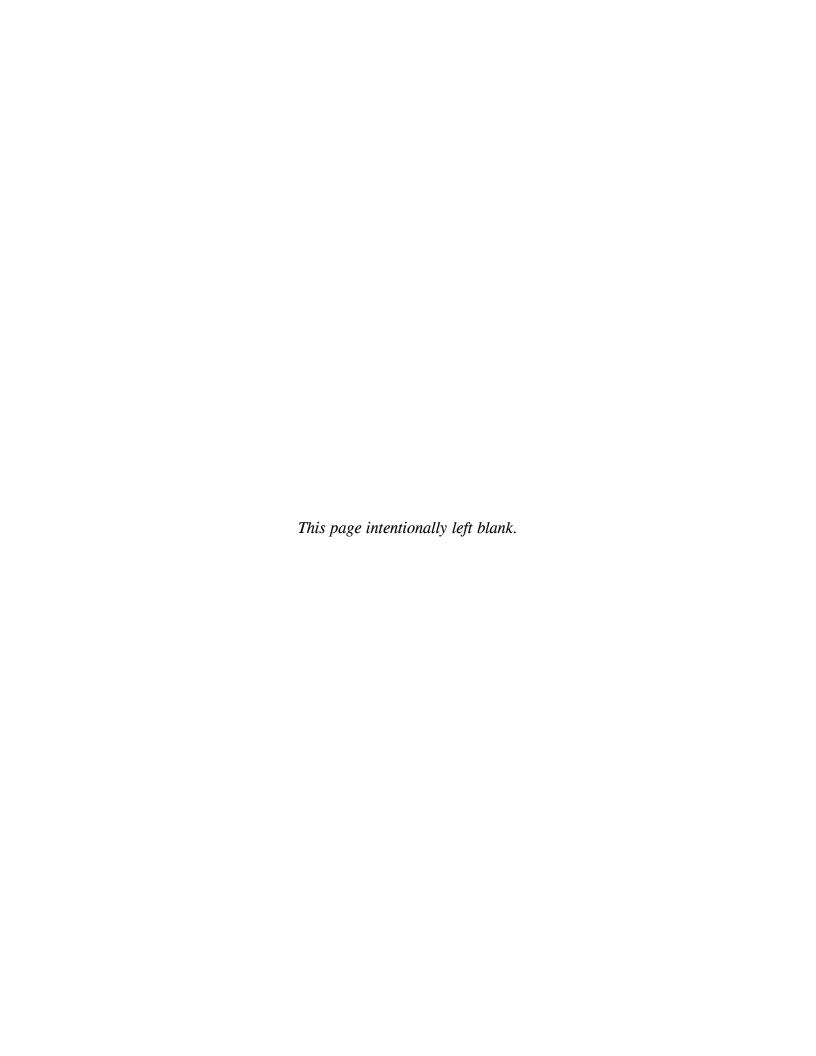
The GETS operated from January through June 2016, with approximately 48.11 hours of downtime. The downtime was attributed to the following: a programmable logic controller (PLC) communication error with an unknown cause and a plant shutdown overnight due to no communication with injection gallery in January; contract negotiations in March; the collection of semi-annual non-pumping water levels in May; and a carbon change out for vessel LPC-1 and a storm related power loss in June. Water leaving the plant from the treated effluent tank met all effluent discharge limits.

The GETS achieved 100% removal efficiency for PCE and TCE that entered the plant. Treatment system influent and effluent sampling occurred on a monthly basis, as required by the Permit Equivalent.

Approximately 23% less water was treated during the first half of 2016 than during the second half of 2015 (HGL, 2016a). The mass of VOCs removed in the first half of 2016 was slightly lower than the mass removed during the second half of 2015 (HGL, 2016a). The average total VOC concentration during the first half of 2016 was similar to the average total VOC concentration during the second half of 2015.

6.2 GROUNDWATER SAMPLING

Groundwater sampling was performed in accordance with the Permit Equivalent.

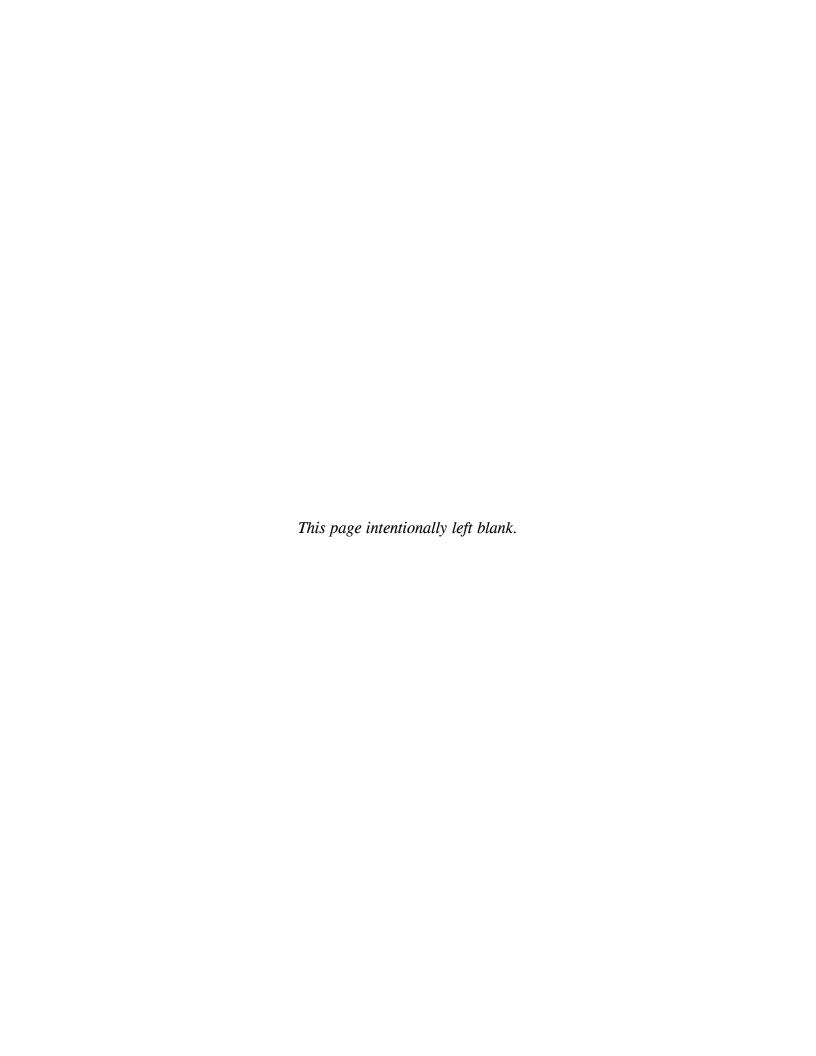


7.0 FUTURE ACTIVITIES

Future activities planned at the SJCC/GSC site are as follows:

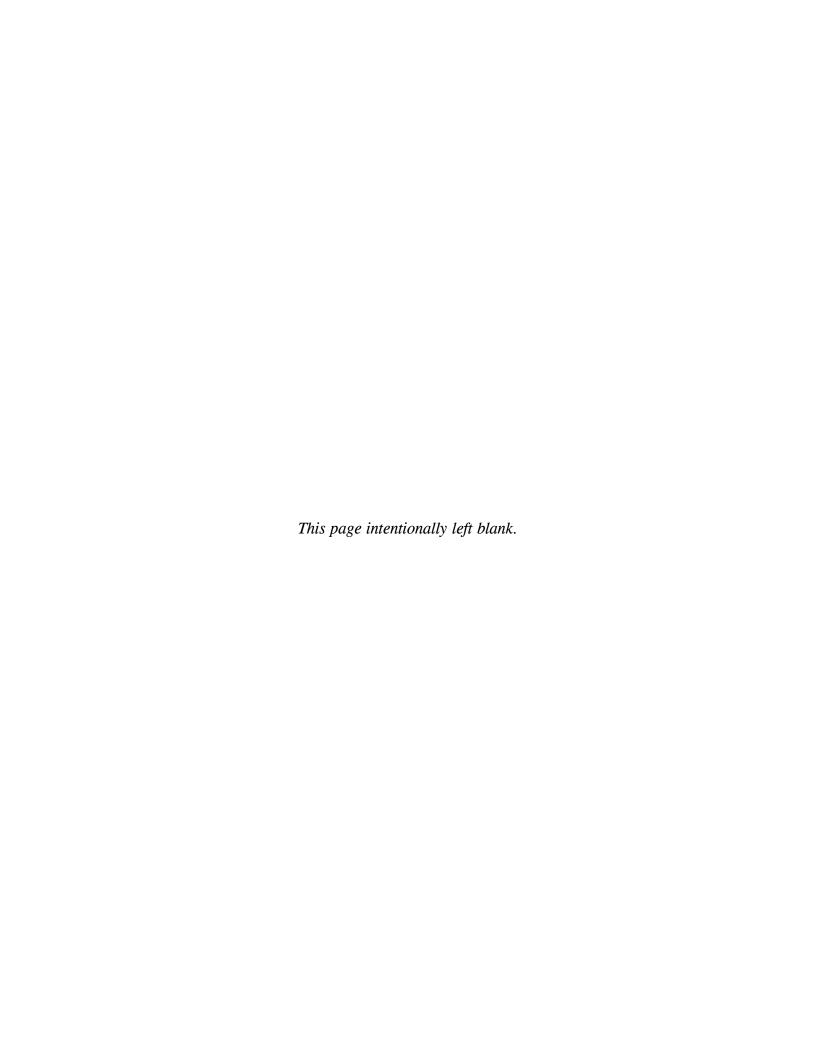
- Continue semi-annual groundwater monitoring and monthly treated effluent sampling in accordance with the NJPDES/DGW Permit Equivalency;
- Initiate activities to gain property access for additional monitoring wells to delineate the southern extent of the downgradient plume; and
- Evaluate the GWTP and well sampling program for potential optimization.

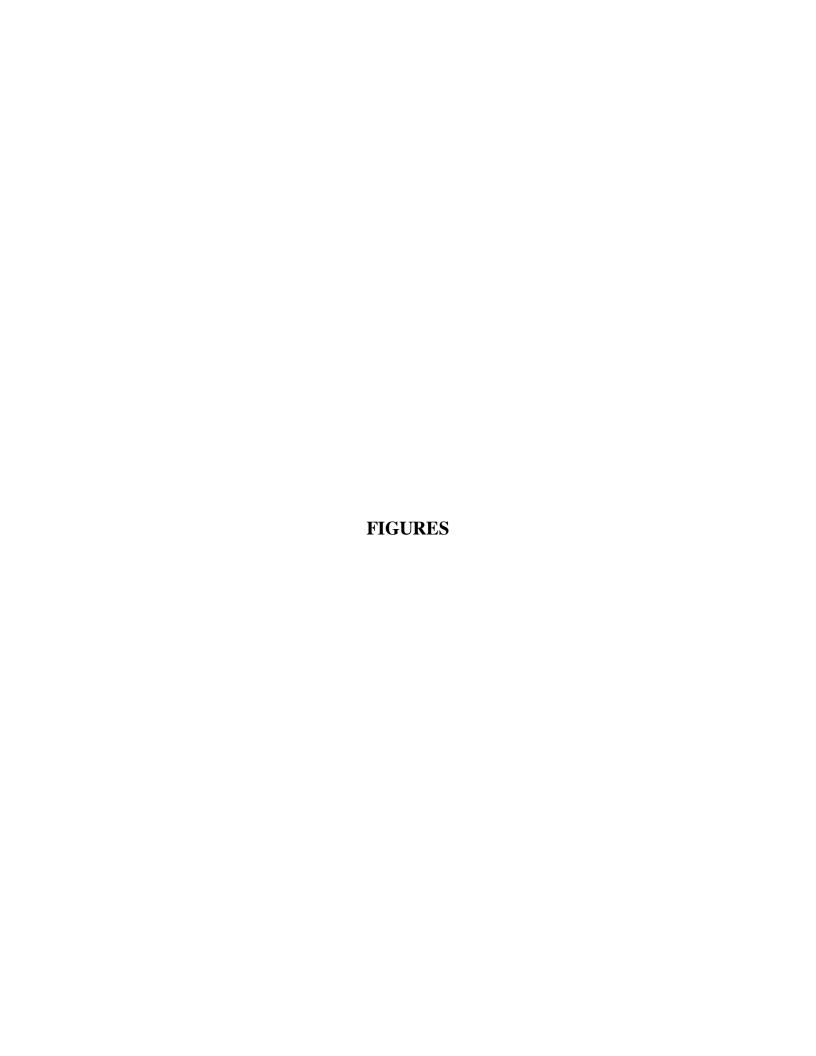
It should be noted that additional site activities outside of HGL's project scope are ongoing and will be continuing for the near future. Another USACE contractor is conducting additional on-site remediation for VOC-impacted soils behind the GWTP using in situ thermal heating by electrical resistivity.



8.0 REFERENCES

- HydroGeoLogic, Inc. (HGL), 2015. Project-Specific Uniform Federal Policy Quality Assurance Project Plan, Operation and Maintenance of the Groundwater Treatment Plant, South Jersey Clothing Company Superfund Site, Minotola, New Jersey, Revision 2. April.
- HGL, 2016a. Semi-Annual Compliance Report, July through December 2015, Operation and Maintenance of the Groundwater Treatment Plant, South Jersey Clothing Company Superfund Site, Minotola, New Jersey. March.
- HGL, 2016b. Project-Specific Uniform Federal Policy Quality Assurance Project Plan Addendum, Operation and Maintenance of the Groundwater Treatment Plant, South Jersey Clothing Company Superfund Site, Minotola, New Jersey, Revision 2. May.
- New Jersey Department of Environmental Protection (NJDEP), 1997. Discharge to Groundwater (NJPDES-DGW) Permit Equivalent, South Jersey Clothing Company Superfund Site, ID #NJD980766828. April.
- NJDEP, 2005. Discharge to Groundwater (NJPDES-DGW) Permit Equivalent Update, South Jersey Clothing Company Superfund Site. December.
- Sevenson Environmental Services, Inc., 2012. Operation and Maintenance Manual for the Groundwater Extraction/Treatment System, South Jersey Clothing Company/Garden State Cleaners Superfund Site, Minotola Township, New Jersey.





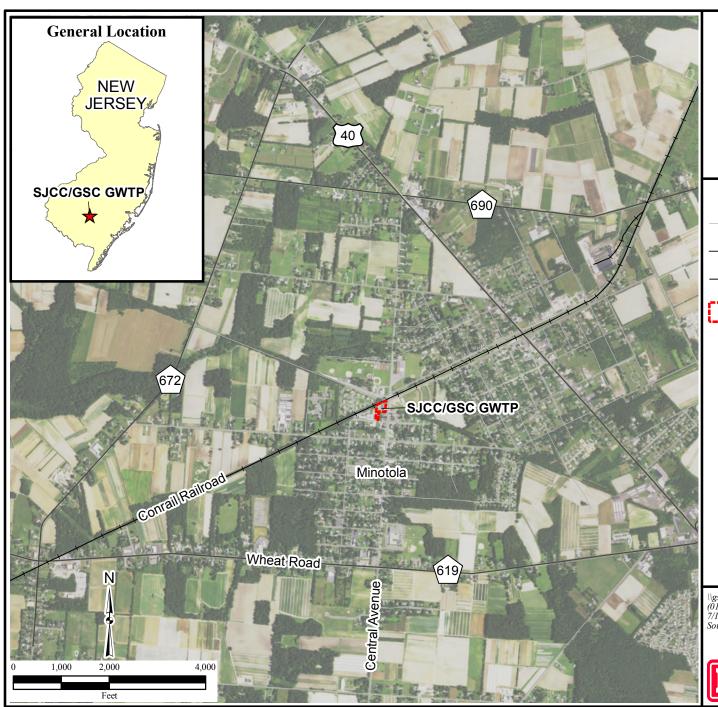


Figure 1 **Site Location Map**

Legend

Minor Road

Major Road

Railroad

SJCC/GSC GWTP

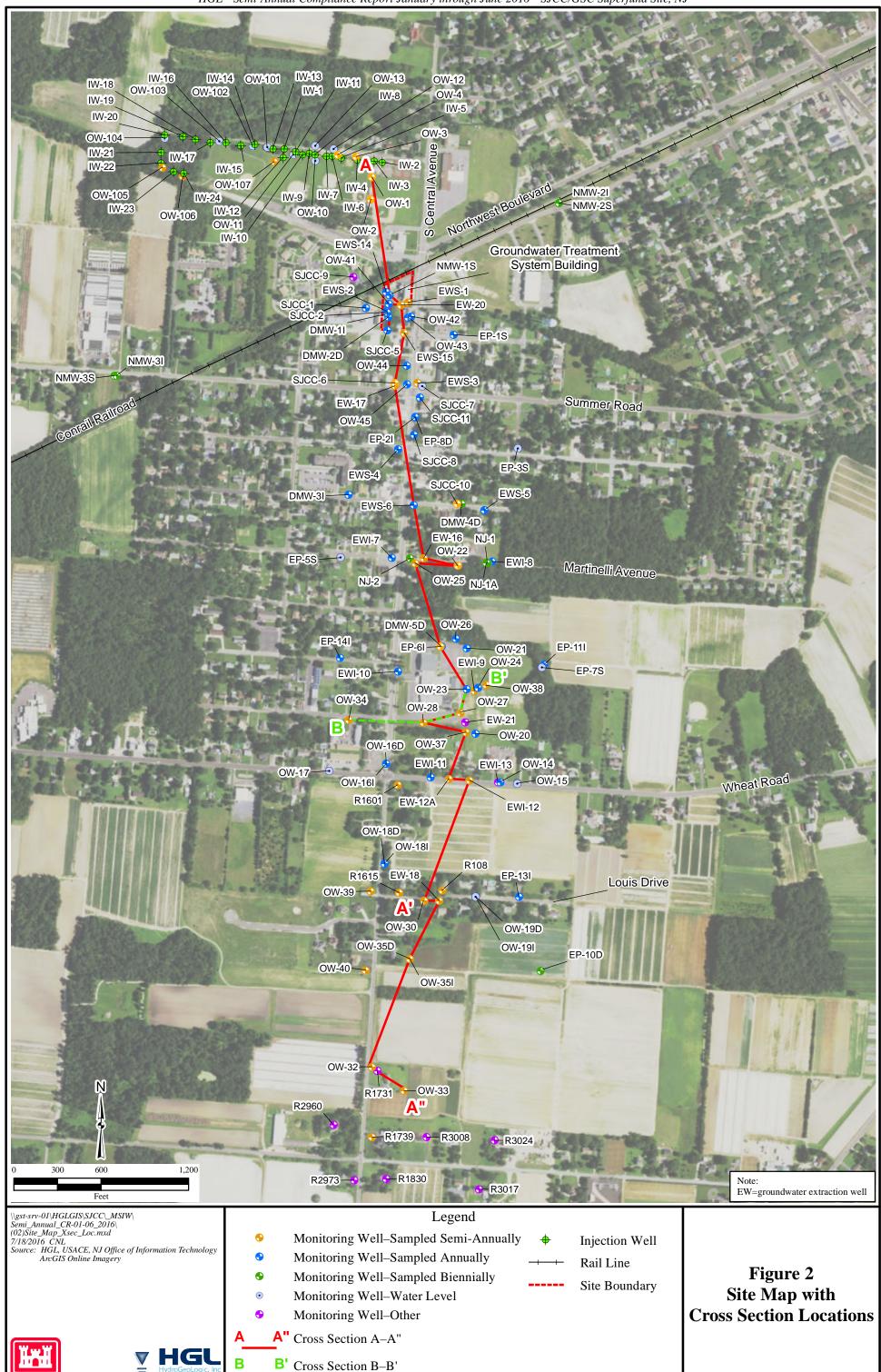
Notes:

GSC=Garden State Cleaners GWTP=groundwater treatment plant SJCC=South Jersey Clothing Company

\\gst-srv-01\HGLGIS\SJCC_MSIW\Semi_Annual_CR_01-06_2016\\(01)\Location Map.mxd\\\7/18/2016 \cdot \text{NL}\\\Source: HGL, U.S. Census Bureau, ESRI,\\ArcGIS Online Imagery\\end{array}









10/24/2016 CNL Source: HGL, USACE, NJ Office of Information Technology ArcGIS Online Imagery

- Monitoring Well-Sampled Semi-Annually
- Monitoring Well-Sampled Annually
- Monitoring Well-Sampled Biennially
- Monitoring Well-Water Level
- Monitoring Well-Other Injection Well

Site Boundary

PCE Contour (dashed where inferred)

Figure 3 **Tetrachloroethene** (PCE) **Isoconcentration Map April 2016**





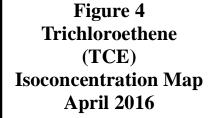


10/24/2016 CNL Source: HGL, USACE, NJ Office of Information Technology ArcGIS Online Imagery

- Monitoring Well-Sampled Semi-Annually
- Monitoring Well-Sampled Annually
- Monitoring Well-Sampled Biennially
- Monitoring Well-Water Level
- Monitoring Well-Other Injection Well

Site Boundary

TCE Contour (dashed where inferred)









Site Boundary

where inferred)

VOC Contour (dashed

Total Volatile Organic

Compounds (VOC)

Isoconcentration Map

April 2016

HAH

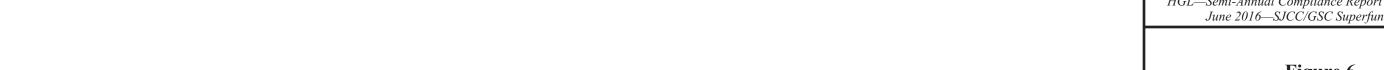


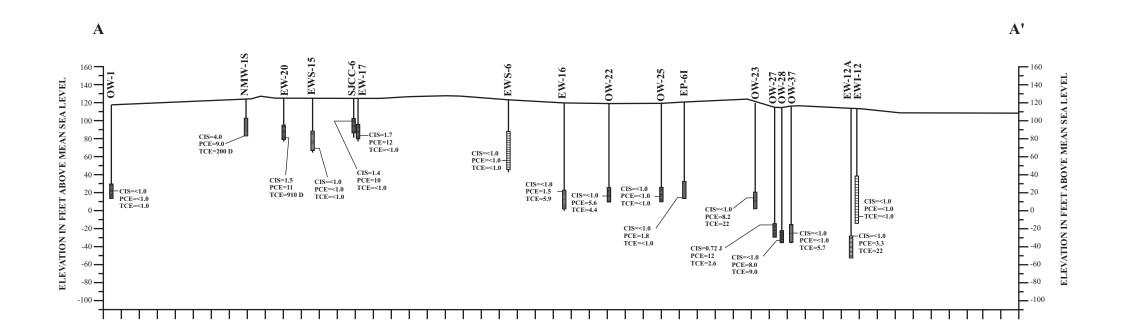
Monitoring Well-Sampled Biennially

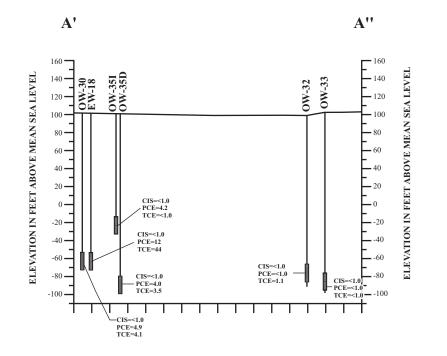
Monitoring Well–Water Level

Monitoring Well-Other

Injection Well







HGL—Semi-Annual Compliance Report January through June 2016—SJCC/GSC Superfund Site, NJ

Figure 6 **Cross Section A-A''** January - June 2016

Legend

Well with Well Screen

Cis-1,2-Dichloroethene

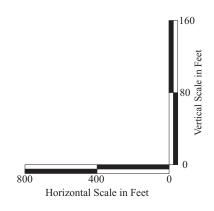
Tetrachloroethene

TCE Trichloroethene

Estimated Value

Not Sampled NS

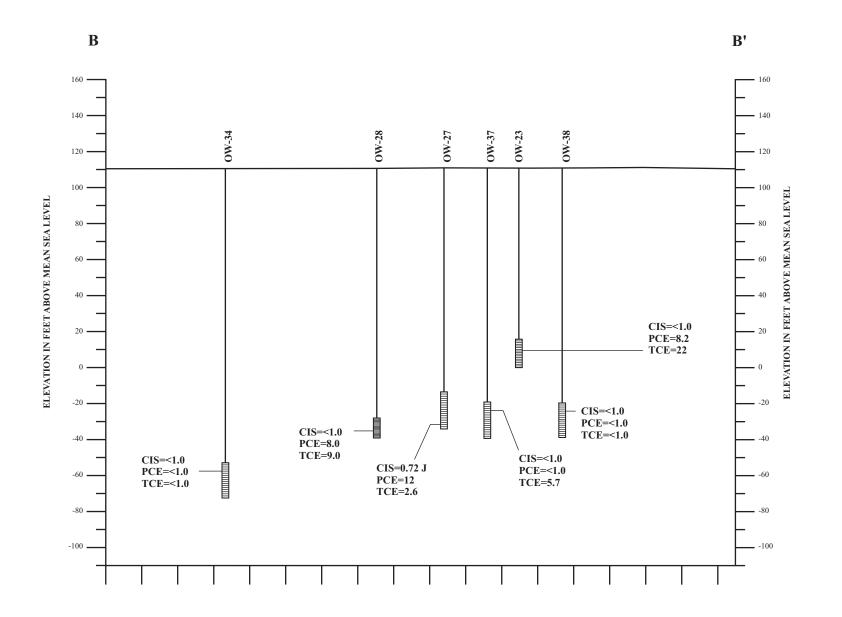
Note: All concentrations measured in micrograms per liter (μg/L)



\\Gst-srv-01\\hglgis\SJCC_MSIW\Semi_Annual_CR_01-06_2016\\((06)Cross-sec_AA.cdr\)\\10/24/2016 CNL\\Source: HGL, SAIC







HGL—Semi-Annual Compliance Report January through June 2016—SJCC/GSC Superfund Site, NJ

Figure 7 Cross Section B-B' January - June 2016

Legend

W

Well with Well Screen

CIS Cis-1,2-Dichloroethene

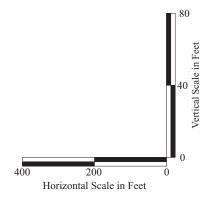
PCE Tetrachloroethene

TCE Trichloroethene

Estimated Value

NS Not Sampled

Note: All concentrations measured in micrograms per liter ($\mu g/L$)



\\Gst-srv-01\\hglgis\\SJCC_MSIW\\Semi_Annual_CR_01-06_2016\\\(07)Cross-sec_BB.cdr\\\07/14/2016\ ARW\\Source: SAIC\







Groundwater

Groundwater

Depression

Elevation Contour

Elevation Contour

Contour Map

Shallow Wells

May 2016

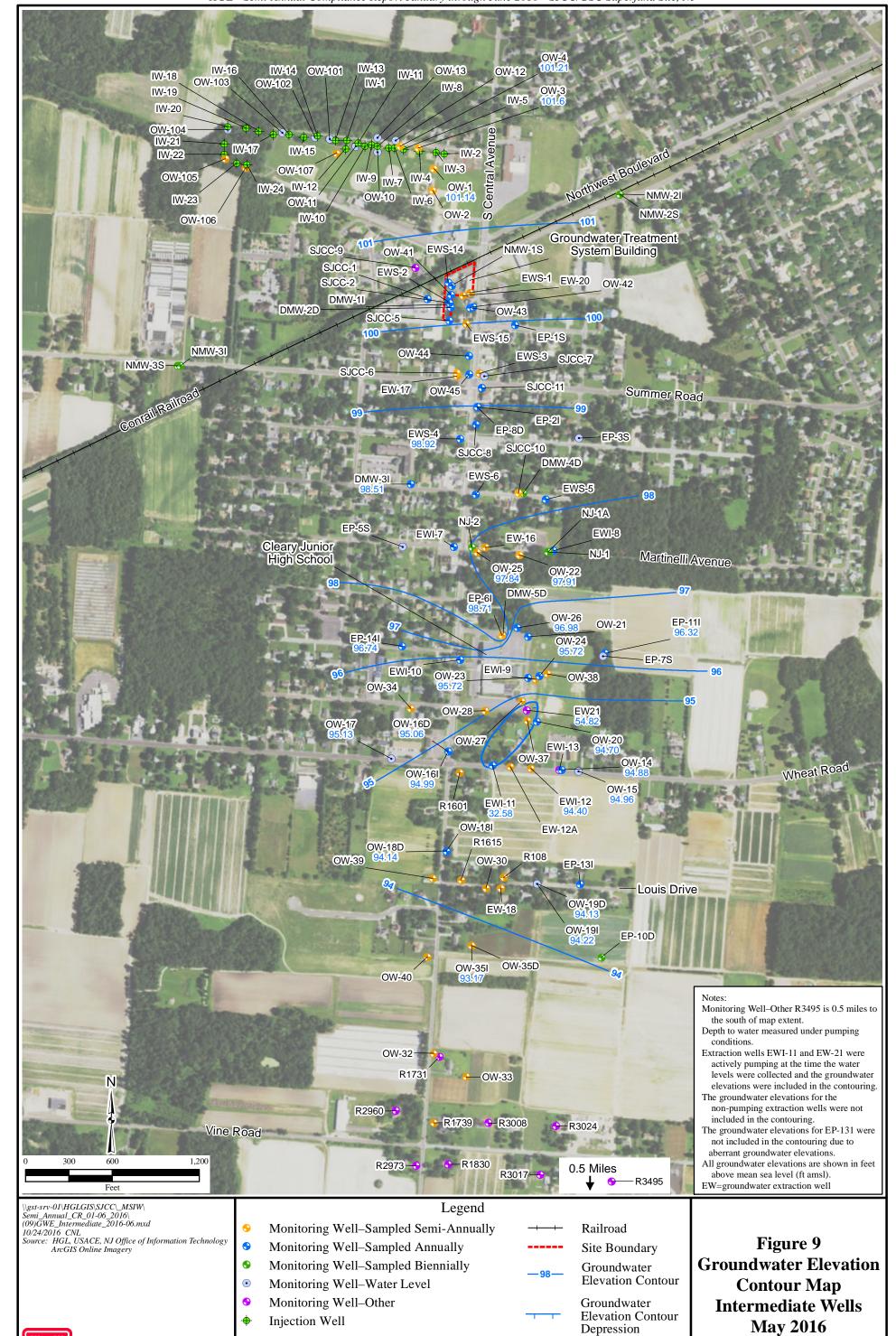
WWW.



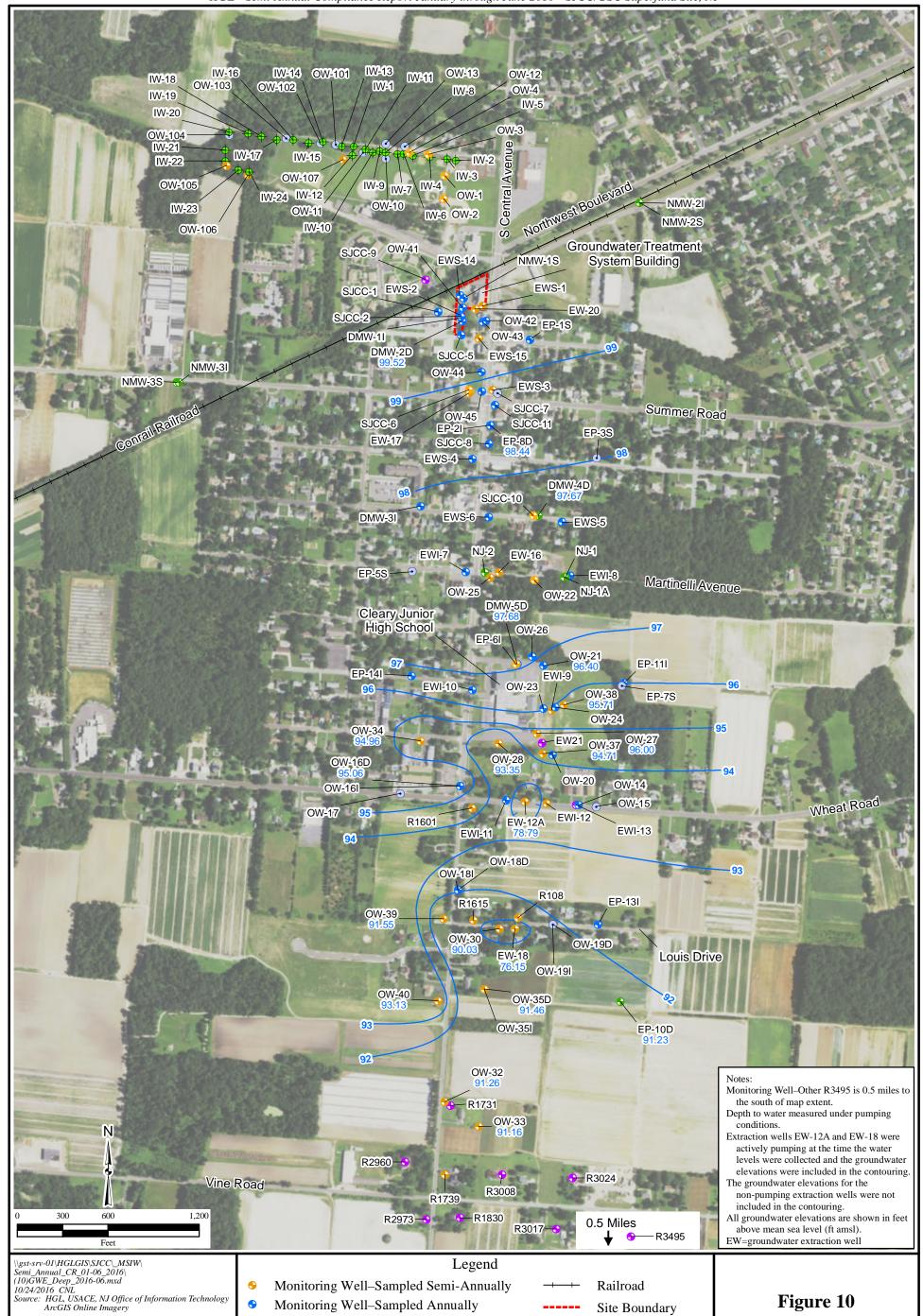
Monitoring Well-Water Level

Monitoring Well-Other

Injection Well



HGL



Groundwater Elevation

Contour Map

Deep Wells

May 2016

Groundwater Elevation Contour

Groundwater Elevation Contour

Depression



Monitoring Well-Sampled Biennially

Monitoring Well-Water Level

Monitoring Well-Other

Injection Well



Table 1 Effluent Discharge Criteria SJCC/GSC Superfund Site¹ January - June 2016

Chemical Parameter	Discharge Limit (μg/L)
1,1-dichloroethene	2
cis-1,2-dichloroethene ²	70
1,1,1-trichloroethane ²	30
Carbon tetrachloride	2
Trichloroethene	1
Benzene	1
Tetrachloroethene	1
Chloroform	3
2-butanone	300
1,1,2-trichloroethane ²	50
Bromodichloromethane	1
Vinyl chloride	5
Chloroethane	50
Xylene ²	1,000
Total Suspended Solids	Negligible
Total Dissolved Solids	500,000
Iron	300
Manganese	50
рН	Background - 8.5 ³

Notes

 $\mu g \, / L$ - micrograms per liter

- 1 -Information from Table 2 of the NJDEP Discharge to Groundwater Permit Equivalent, dated April 9, 1997.
- 2 The NJ MCL for this constituent has been changed, and the SRP is using the MCL as an Interim Specific Criteria, pursuant to NJDEP internal Memorandum from Rick Gimello to staff dated 5 February 1997. Therefore, the discharge limit is set equal to the new MCL.
- 3 The NJ State Secondary Drinking Water Standard for pH is 6.5 to 8.5. The pH of the receiving water is 4.5. The pH effluent criteria is set at the naturally occurring background 8.5, but it is highly recommended to discharge the effluent water close to naturally occurring background condition.

Table 2 Downtime SJCC/GSC Superfund Site January - June 2016

D-4-	Time Down	D	M41-1 T-4-1-
Date	(hours)	Reason	Monthly Totals
January			
1/4/2016	9.83	PLC communication error, unknown cause; Plant shutdown overnight due to no communication with injection gallery	16.50
1/5/2016	6.67	Plant shutdown overnight due to no communication with injection gallery	10.30
February			
	0		0.00
March			
3/8/2016	0.28	Due to no contract in place, told to shut down and secure plant at end of day. 2nd call start back up.	0.28
April			
	0		0.00
May			
5/25/2016	9.5	Plant shut down to collect non-pumping static water levels	23.50
5/26/2016	14	Plant shut down to collect non-pumping static water levels	23.30
June			
6/2/2016	6.50	Liquid carbon vessel LPC-1 change out event	7.92
6/7/2016	1.33	Storm related power loss	7.83
Total			48.11

Table 3
Total PCE and TCE Removed
SJCC/GSC Superfund Site
January - June 2016

1st Half 2016	Treated Gallons (Millions)	PCE Removed (Pounds)	TCE Removed (Pounds)	Total VOCs Removed (Pounds)
January	16.7	0.64	3.76	4.4
February	16.0	0.56	3.87	4.43
March	16.6	0.56	3.89	4.45
April	15.8	0.69	2.38	3.07
May	16.6	0.58	4.45	5.03
June	14.4	0.37	2.89	3.26
Total	96.1	3.40	21.24	24.64

Notes

PCE - Tetrachloroethene

TCE - Trichloroethene

VOCs - Volatile Organic Compounds

Table 4
System Removal Efficiency
SJCC/GSC Superfund Site
January - June 2016

Date	Parameter	EQ Concentration (μg/L)	TET Concentration (μg/L)	% Removed
1/6/2016	PCE	3.9	<1.0	100%
1/0/2010	TCE	27	<1.0	100%
2/4/2016	PCE	4.2	<1.0	100%
2/4/2010	TCE	29	<1.0	100%
3/8/2016	PCE	4	<1.0	100%
3/8/2010	TCE	28	<1.0	100%
4/4/2016	PCE	5.2	<1.0	100%
4/4/2010	TCE	18	<1.0	100%
5/23/2016	PCE	4.2	<1.0	100%
3/23/2010	TCE	32	<1.0	100%
6/13/2016	PCE	3.1M	<1.0	100%
0/13/2010	TCE	24	<1.0	100%
Awayaga	PCE	4.1	ND	100%
Average	TCE	26	ND	100%

Notes

EQ - Equalization Tank

TET - Treated Effluent Tank

 $\mu g/L$ - micrograms per Liter

PCE - tetrachloroethene

TCE - trichloroethene

M - manual integrated compound

Table 5
Groundwater Treatment System Sampling Laboratory Analytical Summary
SJCC/GSC Superfund Site

Equalization Tank

January - June 2016

Sample	Location		Equalization Tank (EQ)								
Sam	ple ID		EQ	EQ	EQ	EQ	EQ	EQ			
	le Date		1/6/16	2/4/16	3/8/16	4/4/16	5/23/16	6/13/16			
	Discharge										
Analyte	Limit	Units									
Semivolatile Organic Comp	ounds by Meth	od 8270D									
1,4-dioxane	0.4	μg/L	NA	NA	NA	NA	NA	< 0.21			
Volatile Organic Compoun	ds by Method 82	260B									
1,1,1-Trichloroethane	30	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			
1,1,2-Trichloroethane	3	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			
1,1-Dichloroethene	2	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			
1,2-Dichloroethene (Total)	**	μg/L	NA	NA	NA	NA	NA	NA			
2-Butanone	300	μg/L	<10	<10	<10	<10	<10	<10			
Benzene	1	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			
Bromodichloromethane	1	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			
Carbon tetrachloride	2	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			
Chloroethane	50	μg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0			
Chloroform	3	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			
cis-1,2-Dichloroethene	70	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			
m,p-Xvlene	*	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			
Methyl-tert-butyl ether	**	μg/L	0.38J	0.43J	0.37J	0.46J	0.40J	0.48J			
o-Xylene	*	μg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50			
Tetrachloroethene	1	μg/L	3.9	4.2	4.0	5.2	4.2	3.1M			
trans-1,2-Dichloroethene	50	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			
Trichloroethene	1	μg/L	27	29	28	18	32	24			
Vinyl chloride	5	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			
Xylene (Total)	1,000	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			
Metals by EPA Method 6010B											
Iron	0.3	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	0.021J	0.027J			
Manganese	0.05	mg/L	0.023	0.022	0.022	0.02	0.023	0.026			
Conventional Chemistry Parameters											
pH in Water	4.5 to 8.5	pH Units	5.2	4.9	5.0	5.2	5.1	5.4			
Total Dissolved Solids	500	mg/L	60	75	66	64	81	76			
Total Suspended Solid	Negligible	mg/L	NA	NA	NA	NA	NA	NA			

Notes

ALPC1 - LGAC vessel 1

ALPC2 - LGAC vessel 2

NA - not analyzed for

Bold - indicates result exceeds discharge limit; or below in the case of pH

* Permit Equivalent limits total xylene to 1,000 µg/L

** Not specified in Permit Equivalent

J - estimated value

M - Manual integrated compound

(1) - Holding time exceeded

(2) - LSC/LCSD recovery outside QC limits

Table 5 Groundwater Treatment System Sampling Laboratory Analytical Summary SJCC/GSC Superfund Site January - June 2016

Sample I	ocation						After	r 1st Liqu	id Phase	Carbon A	dsorption	Unit (AL	PC1)				
Sampl	e ID		ALPC1	ALPC1 ALPC1							ALPC1						
Sample	Date		1/6/16 1/14/16 1/20/16 1/28/16 2				2/4/16	2/11/16	2/18/16	2/24/16	3/2/16	3/8/16	3/15/16	3/23/16	3/31/16	4/4/16	4/11/16
	Discharge																
Analyte	Limit	Units															
Volatile Organic Compou																	
1,1,1-Trichloroethane	30	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	3	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	2	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethene (Total)	**	μg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Butanone	300	μg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<1.0	<1.0	<1.0	<1.0
Benzene	1	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	1	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon tetrachloride	2	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	50	μg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chloroform	3	μg/L	0.57J	0.55J	0.56J	0.53J	0.60J	<1.0	0.51J	<1.0	<1.0	0.52J	0.60J	0.47J	0.47J	0.51J	0.54J
cis-1,2-Dichloroethene	70	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
m,p-Xvlene	*	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl-tert-butyl ether	**	μg/L	0.49J	0.48J	0.47J	0.46J	0.49J	< 0.50	0.41J	< 0.50	0.45J	0.49J	0.46J	0.57J	0.70J	0.51J	0.56J
o-Xylene	*	μg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Tetrachloroethene	1	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	50	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	1	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.74J	0.85J
Vinyl chloride	5	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylene (Total)	1,000	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Metals by EPA Method 60																	
Iron	0.3	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Conventional Chemistry I																	
pH in Water	4.5 to 8.5	pH Units	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Dissolved Solids	500	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Suspended Solids	Negligible	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes

ALPC1 - LGAC vessel 1 ALPC2 - LGAC vessel 2 NA - not analyzed for

Bold - indicates result exceeds discharge limit; or below in the case of pH

- * Permit Equivalent limits total xylene to 1,000 $\mu\text{g/L}$
- ** Not specified in Permit Equivalent
- J estimated value
- B blank contamination
- (1) Holding time exceeded
- (2) LSC/LCSD recovery outside QC limits

Table 5 Groundwater Treatment System Sampling Laboratory Analytical Summary SJCC/GSC Superfund Site January - June 2016

	Sample Location Sample ID			After 1st Liquid Phase Carbon Adsorption Unit (ALPC1)			(ALPC2)			After 1st Liquid Phase Carbon Adsorption Unit (ALPC1)			
Sample	e ID		ALPC1	ALPC1	ALPC1	ALPC2	ALPC2	ALPC2	ALPC2	ALPC2	ALPC2	ALPC2	ALPC2
Sample	Date		4/21/16	4/27/16	5/5/16	5/11/16	5/19/16	5/23/16	6/1/16	6/9/16	6/13/16	6/23/16	6/29/16
Analyte	Discharge Limit	Units											
Volatile Organic Compour		d 8260B											
1,1,1-Trichloroethane	30	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	3	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	2	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethene (Total)	**	μg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Butanone	300	μg/L	<1.0	<1.0	<1.0	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	1	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	1	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon tetrachloride	2	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	50	μg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chloroform	3	μg/L	<1.0	0.57J	<1.0	<1.0	0.57J	<1.0	<1.0	<1.0	<1.0	0.54J	0.50J
cis-1,2-Dichloroethene	70	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
m,p-Xvlene	*	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl-tert-butyl ether	**	μg/L	0.50J	0.52J	0.44J	0.50J	0.56J	0.56J	0.50J	0.44J	0.45J	0.65J	< 0.50
o-Xylene	*	μg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Tetrachloroethene	1	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	50	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	1	μg/L	0.85J	1.2	1.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	5	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylene (Total)	1,000	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Metals by EPA Method 60													
Iron	0.3	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	0.05	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Conventional Chemistry P													
pH in Water	4.5 to 8.5	pH Units	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Dissolved Solids	500	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Suspended Solids	Negligible	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes

ALPC1 - LGAC vessel 1

ALPC2 - LGAC vessel 2

NA - not analyzed for

Bold - indicates result exceeds discharge limit; or below in the case of pH

* Permit Equivalent limits total xylene to 1,000 µg/L

** Not specified in Permit Equivalent

J - estimated value

(1) - Holding time exceeded

(2) - LSC/LCSD recovery outside QC limits

Table 5 Groundwater Treatment Sampling Laboratory Analytical Summary SJCC/GSC Superfund Site July - December 2015

TET

Samp	le Location			T	reated Efflue	nt Tank (TE	T)					
Sar	nple ID		TET	TET	TET	TET	TET	TET				
Sam	ple Date		1/6/16	2/4/16	3/8/16	4/4/16	5/23/16	6/13/16				
	Discharge											
Analyte	Limit	Units										
Semivolatile Organic Compo	unds by Method 8	270D										
1,4-dioxane	0.4	μg/L	NA	NA	NA	NA	NA	< 0.21				
Volatile Organic Compounds by Method 8260B												
1,1,1-Trichloroethane	30	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				
1,1,2-Trichloroethane	3	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				
1,1-Dichloroethene	2	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				
1,2-Dichloroethene (Total)	**	μg/L	NA	NA	NA	NA	NA	NA				
2-Butanone	300	μg/L	<10	<10	<10	<10	<10	<10				
Benzene	1	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				
Bromodichloromethane	1	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				
Carbon tetrachloride	2	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				
Chloroethane	50	μg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0				
Chloroform	3	μg/L	<1.0	<1.0	0.5	<1.0	<1.0	<1.0				
cis-1,2-Dichloroethene	70	μg/L	<1.0	<1.0	0.50J	<1.0	<1.0	<1.0				
m,p-Xvlene	*	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				
Methyl-tert-butyl ether	**	μg/L	0.40J	0.53J	0.49J	0.50J	< 0.50	< 0.50				
o-Xylene	*	μg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50				
Tetrachloroethene	1	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				
trans-1,2-Dichloroethene	50	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				
Trichloroethene	1	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				
Vinyl chloride	5	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				
Xylene (Total)	1,000	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				
Metals by EPA Method 6010)B											
Iron	0.3	mg/L	0.03J	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05				
Manganese	0.05	mg/L	0.029	0.023	0.023	0.021	0.024	0.045				
Conventional Chemistry Par	ameters											
pH in Water	4.5 to 8.5	pH Units	5.2	5.0	4.9	5.2	5.1	5.6				
Total Dissolved Solids	500	mg/L	65	66	94	68	75	79				
Total Suspended Solids	Negligible	mg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0				

Notes

ALPC1 - LGAC vessel 1 ALPC2 - LGAC vessel 2

NA - not analyzed for

Bold - indicates result exceeds discharge limit; or below in the case of pH

- * Permit Equivalent limits total xylene to 1,000 μ g/L
- ** Not specified in Permit Equivalent
- J estimated value
- (1) Holding time exceeded
- (2) LSC/LCSD recovery outside QC limits

Table 6 Extraction Well Pumping Rates and Monthly and Semi-Annual Totals SJCC/GSC Superfund Site January - June 2016

Well		Daily	Average Pu	mping Rate	e (gpm)		Semi-Annual
Well	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Daily Average
EWS-1			W	ell permanen	tly off-line.		
EWS-2	0	0	0	0	0	0	0
EWS-3	0	0	0	0	0	0	0
EWS-4	0	0	0	0	0	0	0
EWS-5	0	0	0	0	0	0	0
EWS-6	0	0	0	0	0	0	0
EWI-7	0	0	0	0	0	0	0
EWI-8			W	ell permanen	tly off-line.		
EWI-9			W	ell permanen	tly off-line.		
EWI-10	0	0	0	0	0	0	0
EWI-11	45.1	45.72	41.93	41.66	40.38	46.34	43.5
EWI-12	0	0	0	0	0	0	0
EWI-12A	101.55	103.9	104.04	104.18	101.59	61.05	96.1
EWI-13			W	ell permanen	tly off-line.	•	•
EW-14	0	0	0	0	0	0	0
EW-15	0	0	4.07	12.52	0	0	2.8
EW-16	0	0	0	0	0	0	0
EW-17	0.0	0.0	0.0	0.28	0.0	0	0
EW-18	89.87	92.61	92.35	92.02	89.63	51.17	84.6
EW-20	51.04	52.36	37.65	22.37	51.09	52.12	44.4
EW-21	74.09	75.53	75.78	75.54	74.05	77.01	75.3
Total	361.7	370.1	355.8	348.6	356.7	287.7	346.8

Well			Monthly To	otal (Gallons)			Semi-Annual
VV CII	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total
EWS-1			W	ell permanen	tly off-line.	•	
EWS-2	0	0	0	0	0	0	0
EWS-3	0	0	0	0	0	0	0
EWS-4	0	0	0	0	0	0	0
EWS-5	0	0	0	0	0	0	0
EWS-6	0	0	0	0	0	0	0
EWI-7	0	0	0	0	0	0	0
EWI-8			W	ell permanen	tly off-line.		
EWI-9			W	ell permanen	tly off-line.		
EWI-10	0	0	0	0	0	0	0
EWI-11	2,013,071	1,909,283	1,871,681	1,799,673	1,802,495	2,001,975	11,398,178
EWI-12	0	0	0	0	0	0	0
EWI-12A	4,533,078	4,338,840	4,644,245	4,500,472	4,534,877	2,637,324	25,188,836
EWI-13		•	W	ell permanen	tly off-line.		
EW-14	0	0	0	0	0	0	0
EW-15	0	0	181,840	540,774	0	0	722,614
EW-16	0	0	0	0	0	0	0
EW-17	0	0	0	12,024	0	0	12,024
EW-18	4,011,618	3,867,531	4,122,586	3,975,438	4,001,157	2,210,422	22,188,752
EW-20	2,278,507	2,186,614	1,680,888	966,207	2,280,765	2,251,627	11,644,608
EW-21	3,307,181	3,154,276	3,382,940	3,263,469	3,305,738	3,326,969	19,740,573
Total	########	########	15,884,180	15,058,057	########	12,428,317	90,895,585

Notes

1) gpm - gallons per minute

- 2) OL Extraction wells EWS-1, EW-8 and EW-13 have been mechanically and electrically disconnected and are permanently offline. The control and power wiring from EW-8 and EW-13 were used for wells EW-12A and EW-16, which were brought online in March 2007. The control and power wiring for EWS-1 was used for EW-20, which was brought online in February 2009.
- 3) Extraction wells 2-7, 10, 12, and 14-16 were off-line throughout the majority of this reporting period as they continue to contain non-detectable concentrations or trace levels of contaminants. They may be exercised periodically and/or used as required to balance flow throughout the plant.
- 4) The information on this table is for individual extraction well performance and should not be compared to the treatment plant influent flow summary (provided in Table 3 and Table 7). The treatment plant flow summary is based on different totalizer values, which may not agree with the values for each individual well.
- 5) New extraction well EW-21 was brought online September 2013 to replace EWI-9. Extraction well EWI-9 is now permanently offline. Extraction well EWI-11 was brought online August 28, 2014. Extraction well EWI-17 was shut down in late November 2015.
- 6) Extraction wells EW-18 and EW-12A were offline for the majority of June 2016 due to failed pump motors. The motors in both wells were replaced in late June 2016.
- 7) Extraction well EW-15 operated in March and April 2016 while flows from well EW-20 were reduced.

Table 7
Treatment Plant Flow Summary
SJCC/GSC Superfund Site
January - June 2016

	Monthly Average	e Flow (gal/month)	Daily Average	e Flow (gal/day)	Daily Average	e Flow (gal/min)
Month	Month Extraction Well Influent Monthly Totals (gal/month)		Extraction Well Influent Daily Totals (gal/day)	Injected Treated Influent Daily Totals (gal/day)	Extraction Well Influent Daily Totals (gal/min)	Injected Treated Influent Daily Totals (gal/min)
January	16,658,172	16,507,730	537,360	532,507	373	370
February	15,973,050	15,815,810	550,795	545,373	382	379
March	16,612,690	16,453,990	535,893	530,774	372	369
April	15,823,127	15,657,490	527,438	521,916	366	362
May	16,633,893	16,475,360	536,577	531,463	373	369
June	14,414,140	14,301,350	480,471	476,712	334	331
Average Total	16,019,179	15,868,622	528,089	523,124	366.7	363.3

Notes

gal/month - gallons per month gal/day - gallons per day gal/min - gallons per minute

Table 8 Injection Well Flow Rates and Monthly and Semi-Annual Totals SJCC/GSC Superfund Site January - June 2016

Well		Daily	y Average Pu	mping Rate (gpm)		Semi-Annual
vv en	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Daily Average
IW-1	0	0	0	0	0	0	0
IW-2	0	0	0	0	0	0	0
IW-3	0	0	0	0	0	0	0
IW-4	0	0	0	0	0	0	0
IW-5	0	0	0	0	0	0	0
IW-6	0	0	0	0	0	0	0
IW-7	0	0	0	0	0	0	0
IW-8	23.82	24.17	24.19	23.41	24.55	24.55	24.1
IW-9	18.28	21.47	21.37	20.74	21.63	21.63	20.9
IW-10	21.17	21.53	21.49	20.94	21.87	21.87	21.5
IW-11	0	0	0	0	0	0	0
IW-12	0	0	0	0	0	0	0
IW-13	10.2	10.92	11.2	11.12	11.75	11.75	11.2
IW-14	12.85	13.34	13.4	13.18	13.41	13.41	13.3
IW-15	11.9	12.28	12.28	12.08	12.43	12.43	12.2
IW-16	11.38	11.82	11.78	11.52	11.97	11.97	11.7
IW-17	15.36	18.1	18.88	18.62	19.66	19.66	18.4
IW-18	17.83	18.44	18.15	17.2	17.9	17.9	17.9
IW-19	24.75	25.62	25.83	25.52	16.86	16.86	22.6
IW-20	13.81	13.48	13.42	13.51	15.31	15.31	14.1
IW-21	17.29	15.64	16.22	16.12	17.58	17.58	16.7
IW-22	21.44	21.96	17.56	18.1	18.48	18.48	19.3
IW-23	16.47	17.05	16.55	17	18	18	17.2
IW-24	17.42	17.46	12.95	19.45	12.47	12.47	15.4
Trench	21.06	23.57	23.72	22.88	24.03	24.03	23.2
Total	275.0	286.9	279.0	281.4	277.9	277.9	279.7

Wall			Monthly To	tal (Gallons)		Semi-Annual
Well	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total
IW-1	0	0	0	0	0	0	0
IW-2	0	0	0	0	0	0	0
IW-3	0	0	0	0	0	0	0
IW-4	0	0	0	0	0	0	0
IW-5	0	0	0	0	0	0	0
IW-6	0	0	0	0	0	0	0
IW-7	0	0	0	0	0	0	0
IW-8	1,063,429	1,009,300	1,080,000	1,011,360	1,095,840	954,900	6,214,829
IW-9	815,859	896,600	953,900	895,960	965,740	786,200	5,314,259
IW-10	944,924	899,200	959,400	904,450	976,450	852,600	5,537,024
IW-11	0	0	0	0	0	0	0
IW-12	0	0	0	0	0	0	0
IW-13	455,404	456,000	500,000	480,333	524,667	470,000	2,886,404
IW-14	573,600	557,000	598,000	569,333	598,667	561,000	3,457,600
IW-15	531,000	513,000	548,259	522,000	555,000	539,000	3,208,259
IW-16	507,800	493,586	526,000	497,667	534,333	423,000	2,982,386
IW-17	685,600	756,000	843,000	804,333	877,667	874,634	4,841,234
IW-18	795,800	770,000	810,000	743,000	799,000	702,000	4,619,800
IW-19	1,104,800	1,070,000	1,153,000	1,102,333	752,667	355,000	5,537,800
IW-20	616,345	563,000	599,000	583,667	683,333	672,000	3,717,345
IW-21	771,800	653,000	724,000	696,333	784,667	877,000	4,506,800
IW-22	957,200	917,000	784,000	782,000	825,000	818,000	5,083,200
IW-23	735,000	712,000	739,000	734,333	803,494	508,000	4,231,827
IW-24	777,800	729,000	578,000	840,333	556,667	368,000	3,849,800
Trench	940,289	984,259	1,058,702	988,359	1,072,922	996,348	6,040,879
Total	12,276,650	11,978,945	12,454,261	12,155,794	12,406,114	10,757,682	72,029,446

Notes

gpm = gallons per minute

Injection wells 1-7, and 11 through 12 were off-line throughout the majority of this reporting period due to various problems (i.e., well not taking water and/or water rising to the surface).

The information on this table is for individual injection well performance and should not be compared to the treatment plant influent flow summary (provided in Table 7). The treatment plant flow summary is based on different totalizer values, which may not agree with the values for each individual well.

Table 9

Groundwater Analytical Results April 2016 Semi-Annual and Annual Sampling Event

SJCC/GSC Superfund Site

								SJCC/GSC			ACTION V	VELLS							
Well ID		EWS-1	EWS-2	EWS-3	EWS-4	EWS-5	DUP03	EWS-6	EWI-7	EWI-8	EWI-10	EWI-11	EWI-12	EW-12A	EWS-14	EWS-15	EW-16	DUP02	EW-17
Sample Depth (ft)		40	NA	NA	NA	N	J A	NA	NA	91.5	NA	NA	NA	NA	NA	NA	N	A	NA
Sample Date		4/14/16	4/13/16	4/13/16	4/13/16	4/1	3/16	4/13/16	4/13/16	4/13/16	4/13/16	4/13/16	4/13/16	4/13/16	4/13/16	4/13/16	4/13	3/16	4/13/16
Analyte	Units																		
Volatile Organic Compounds b	v Method 8260R																		
1.1.1-Trichloroethane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1.1.2.2-Tetrachloroethane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1.1.2-Trichloroethane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1.2-Dichloropropane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone	μg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Chloroethyl vinyl ether*	μg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	μg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
4-Methyl-2-pentanone	μg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Acetone*	μg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene*	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane*	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform*	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	μg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon disulfide	μg/L	<2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	<2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Carbon tetrachloride*	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	μg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chloroethane	μg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chloroform*	μg/L	<1.0	1.1	11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.60J	<1.0	<1.0	<1.0	1.4	2.8	<1.0	<1.0	<1.0
Chloromethane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.7
cis-1,3-Dichloropropene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane*	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene*	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methvl-tert-butyl ether*	μg/L	< 0.50	0.43J	0.38J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.53J	1.6J	0.62J	0.30J	0.38J	< 0.50	< 0.50	< 0.50	< 0.50
Methylene Chloride	μg/L	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Xylenes (Total)	μg/L	<0.50	<0.50	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	<0.50	<0.50	<0.50	< 0.50	< 0.50	<0.50	<0.50	< 0.50	<0.50	< 0.50	< 0.50
Styrene*	μg/L	<0.50	<0.50	<0.50	< 0.50	< 0.50	< 0.50	<0.50	< 0.50	<0.50	< 0.50	< 0.50	< 0.50	<0.50	<0.50	<0.50	< 0.50	<0.50	< 0.50
Tetrachloroethene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.3	<1.0	<1.0	1.5	1.6	12
Toluene*	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorethene	μg/L	<1.0	<1.0	<1.0	0.72J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	22	<1.0	<1.0	5.9	6.2	<1.0
Vinyl Acetate	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl Chloride	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total VOCs Other Analyses	μg/L	0	0	0	0.72	0	0	0	0	0	0	0	0	25.3	0	0	7.4	7.8	13.7
· · · · · ·	m~/T	NIC	NIC	Nic	Nic	NC	Nic	NIC	NS	Nic	NS	NIC	NS	NIC	NS	Nic	NIC	NIC	NIC
Chloride	mg/L	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS
Iron (Total)	mg/L	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS
Manganese by ICP (Total)	mg/L	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS
Total Dissolved Solids	mg/L mg/L	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS
Total Suspended Solids	pH Units	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS
рΗ	pri Omis	740	140	140	140	140	140	140	140	140	140	140	TAD.	140	140	140	140	140	717)

Notes-

(MQL)

J - estimated value

NS - Not sampled for particular analyte

ND - Not detected above the MQL

R - rejected result to due reason code listed

* Not included in calculation of total VOCs - assumed to be a

laboratory artifact, anomalous or not a site contaminant of concern (1) - Rinsate blank contamination and original result less than reporting

limit

(2) - MS/MSD recoveries outside QC limits

(3) - Holding time exceeded

(4) - Rinsate blank and/or trip blank contamination

Table 9 **Groundwater Analytical Results** April 2016 Semi-Annual and Annual Sampling Event

						А	-		perfund Site										
		EXTRACTIO	NWFIIS					JCC/GSC Su	perruna site		MON	ITORING W	FIIS						
Well ID		EW-18	EW-20	EW-21	DMW-1I	DMW-2D	DMW-3I	DMW-4D	DMW-5D	SJCC-1	SJCC-2	SJCC-5	SJCC-6	SJCC-8	SJCC-10	SJCC-11	EP-1S	EP-6I	EP-8D
Sample Depth (ft)		NA NA	NA	NA	109	225	101	215	225	35	36	39	37	32	42	42	41.5	105	216
Sample Date		4/13/16	4/13/16	4/13/16	4/5/16	4/6/16	4/11/16	NS	4/7/16	4/4/16	4/4/16	4/5/16	4/14/16	4/5/16	4/13/16	4/5/16	4/15/16	4/7/16	4/13/16
Analyte	Units																		
Volatile Organic Compounds	by Method 8260B																		
1,1,1-Trichloroethane	μg/L	<1.0	2.6	<1.0	<1.0	<1.0	<1.0	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0
1,1-Dichloroethene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1.2-Dichloropropane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NS	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

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< 0.50

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< 0.50

< 0.50

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<1.0

<1.0

54

<1.0

<1.0

57.3

NS

NS

NS

NS

NS

NS

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< 5.0

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< 0.50

< 0.50

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<1.0

<1.0

0.74J

<1.0

<1.0

0.74

NS

NS

NS

NS

NS

NS

<10

<10

< 5.0

< 5.0

<10

<1.0

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<1.0

< 5.0

< 2.0

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< 0.50

< 5.0

<1.0

<1.0

1.4

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<1.0

<1.0

< 0.50

< 5.0

< 0.50

< 0.50

10

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<1.0

<1.0

<1.0

<1.0

<1.0

11.4

NS

NS

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NS

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NS

<10

<10

< 5.0

< 5.0

<10

<1.0

<1.0

<1.0

< 5.0

< 2.0

<1.0

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< 5.0

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< 1.0

< 0.50

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<10

< 5.0

< 5.0

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<1.0

<1.0

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< 5.0

< 2.0

<1.0

< 0.50

< 5.0

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NS

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<10

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< 5.0

< 5.0

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< 5.0

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<1.0

< 0.50

< 5.0

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< 0.50

< 5.0

< 0.50

< 0.50

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<1.0

<1.0

<1.0

<1.0

<1.0

NS

NS

NS

NS

NS

NS

рΗ Notes-

(MQL) J - estimated value

1,2-Dichloropropane

2-Chloroethyl vinyl ether*

l-Methyl-2-pentanone

Bromodichloromethane*

-Butanone

-Hexanone

Bromoform*

Bromomethane

Carbon disulfide

Chlorobenzene

Chloroethane

Chloroform*

Chloromethane

Ethylbenzene*

Carbon tetrachloride*

cis-1,2-Dichloroethene

cis-1,3-Dichloropropene

Dibromochloromethane*

Methyl-tert-butyl ether*

trans-1,2-Dichloroethene

trans-1,3-Dichloropropene

Manganese by ICP (Total)

Total Dissolved Solids

Total Suspended Solids

Methylene Chloride

Xylenes (Total)

Tetrachloroethene

Trichlorethene

Vinyl Acetate

Vinyl Chloride

Other Analyses

Total VOCs

Iron (Total)

Chloride

Styrene*

Toluene*

Acetone*

Benzene*

NS - Not sampled for particular analyte

ND - Not detected above the MQL

R - rejected result to due reason code listed

* Not included in calculation of total VOCs - assumed to be a

laboratory artifact, anomalous or not a site contaminant of concern (1) - Rinsate blank contamination and original result less than reporting

μg/L

μg/L

μg/L

μg/L

μg/L

μg/L

μg/L

μg/L

μg/L

μg/L

μg/L μg/L

μg/L

μg/L

μg/L

μg/L

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μg/L

μg/L

μg/L

μg/L μg/L

μg/L

μg/L μg/L

μg/L

mg/L

mg/L

mg/L

mg/L

mg/L

pH Units

<10

< 5.0

< 5.0

<10

0.83J

<1.0

<1.0

< 5.0

< 2.0

<1.0

< 0.50

< 5.0

<1.0

<1.0

<1.0

<1.0

<1.0

< 1.0

< 0.50

< 5.0

< 0.50

< 0.50

12

<1.0

<1.0

<1.0

44

<1.0

<1.0

56

NS

NS

NS

NS

NS

NS

<10

<10

< 5.0

< 5.0

<10

<1.0

<1.0

<1.0

< 5.0

<2.0

<1.0

< 0.50

< 5.0

0.59J

<1.0

1.5

<1.0

<1.0

<1.0

< 0.50

< 5.0

< 0.50

< 0.50

11

<1.0

<1.0

<1.0

910D

<1.0

<1.0

922.5

NS

NS

NS

NS

NS

NS

<10

<10

< 5.0

< 5.0

<10

<1.0

<1.0

<1.0

< 5.0

< 2.0

<1.0

< 0.50

< 5.0

<1.0

<1.0

<1.0

<1.0

<1.0

< 1.0

0.58J

< 5.0

< 0.50

< 0.50

2.4

<1.0

<1.0

<1.0

3.2

<1.0

<1.0

5.6

NS

NS

NS

NS

NS

NS

<10

<10

< 5.0

< 5.0

<10

<1.0

<1.0

< 1.0

< 5.0

< 2.0

<1.0

< 0.50

< 5.0

<1.0

<1.0

<1.0

<1.0

<1.0

<1.0

< 0.50

< 5.0

< 0.50

< 0.50

<1.0

<1.0

<1.0

<1.0

<1.0

<1.0

<1.0

NS

NS

NS

NS

NS

NS

(2) - MS/MSD recoveries outside QC limits

(3) - Holding time exceeded

(4) - Rinsate blank and/or trip blank contamination

<10

<10

< 5.0

8.7 J

<1.0

<1.0

<1.0

< 5.0

< 2.0

<1.0

< 0.50

< 5.0

<1.0

<1.0

<1.0

<1.0

<1.0

<1.0

< 0.50

< 5.0

< 0.50

< 0.50

1.8

<1.0

<1.0

<1.0

<1.0

<1.0

<1.0

3.0

NS

NS

NS

NS

NS

NS

<10

<10

< 5.0

< 5.0

<10

<1.0

<1.0

<1.0

< 5.0

< 2.0

<1.0

< 0.50

< 5.0

<1.0

<1.0

<1.0

<1.0

<1.0

<1.0

< 0.50

< 5.0

< 0.50

< 0.50

<1.0

<1.0

<1.0

<1.0

<1.0

<1.0

<1.0

NS

NS

NS

NS

NS

NS

Table 9

Groundwater Analytical Results April 2016 Semi-Annual and Annual Sampling Event

SJCC/GSC Superfund Site

								se Superiur		ITORING W	ELLS							
Well ID		EP-2I	EP-10D	EP-11I	EP-13I	EP-14I	NMW-1S	DUP01	NMW-2I	NMW-2S	NMW-3S	NMW-3I	NJ-1	NJ-2	OW-1	OW-2	OW-3	OW-4
Sample Depth (ft)		105	192	127	111	117	3	3	110	26	23	91	63	29	95	95	90	90
Sample Date		4/13/16	NS	4/12/16	4/8/16	4/13/16	4/5	/16	NS	NS	NS	NS	NS	NS	4/14/16	10/30/15	4/14/16	4/15/16
Analyte	Units	1																
Volatile Organic Compounds by																		
1.1.1-Trichloroethane	μg/L	<1.0	NS	<1.0	<1.0	<1.0	0.54J	0.51J	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS
1.1.2.2-Tetrachloroethane	μg/L	<1.0	NS	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS
1.1.2-Trichloroethane	μg/L	<1.0	NS	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS
1,1-Dichloroethane	μg/L	<1.0	NS	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS
1,2-Dichloroethane	μg/L	<1.0	NS	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS
1,1-Dichloroethene	μg/L	<1.0	NS	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS
1,2-Dichloropropane	μg/L	<1.0	NS	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS
2-Butanone	μg/L	<10	NS	<10	<10	<10	<10	<10	NS	NS	NS	NS	NS	NS	<10	NS	NS	NS
2-Chloroethyl vinyl ether*	μg/L	<10	NS	<10	<10	<10	<10	<10	NS	NS	NS	NS	NS	NS	<10	NS	NS	NS
2-Hexanone	μg/L	< 5.0	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NS	NS	NS	NS	NS	NS	< 5.0	NS	NS	NS
4-Methyl-2-pentanone	μg/L	< 5.0	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NS	NS	NS	NS	NS	NS	< 5.0	NS	NS	NS
Acetone*	μg/L	<10	NS	<10	<10	<10	<10	<10	NS	NS	NS	NS	NS	NS	<10	NS	NS	NS
Benzene*	μg/L	<1.0	NS	1.8	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS
Bromodichloromethane*	μg/L	<1.0	NS	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS
Bromoform*	μg/L	<1.0	NS	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS
Bromomethane	μg/L	< 5.0	NS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NS	NS	NS	NS	NS	NS	< 5.0	NS	NS	NS
Carbon disulfide	μg/L	<2.0	NS	<2.0	<2.0	<2.0	<2.0	<2.0	NS	NS	NS	NS	NS	NS	<2.0	NS	NS	NS
Carbon tetrachloride*	μg/L	<1.0	NS	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS
Chlorobenzene	μg/L	< 0.50	NS	< 0.50	<0.50	< 0.50	<0.50	<0.50	NS	NS	NS	NS	NS	NS	< 0.50	NS	NS	NS
Chloroethane	μg/L	<5.0	NS	< 5.0	<5.0	<5.0	<5.0	<5.0	NS	NS	NS	NS	NS	NS	<5.0	NS	NS	NS
Chloroform*	μg/L	<1.0	NS	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS	NS	NS	1.6	NS	NS	NS
Chloromethane	μg/L	<1.0	NS	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS
cis-1,2-Dichloroethene	μg/L α/I	<1.0 <1.0	NS NS	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	4.0 <1.0	4.1 <1.0	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	<1.0 <1.0	NS NS	NS NS	NS NS
cis-1,3-Dichloropropene	μg/L μg/L	<1.0	NS NS	<1.0	<1.0	<1.0	<1.0	<1.0	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	<1.0	NS NS	NS NS	NS NS
Dibromochloromethane*	μg/L μg/L	<1.0	NS NS	<1.0	<1.0	<1.0	<1.0	<1.0	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	<1.0	NS NS	NS NS	NS NS
Ethylbenzene* Methyl-tert-butyl ether*	μg/L μg/L	<0.50	NS	<0.50	<0.50	0.66J	<0.50	<0.50	NS	NS	NS	NS NS	NS	NS	0.37J	NS	NS	NS NS
Methylene Chloride	μg/L μg/L	<5.0	NS	<5.0	<5.0	<5.0	<5.0	<5.0	NS	NS	NS	NS	NS	NS	<5.0	NS	NS	NS
Xylenes (Total)	μg/L	< 0.50	NS	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NS	NS	NS	NS	NS	NS	< 0.50	NS	NS	NS
Styrene*	μg/L	< 0.50	NS	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NS	NS	NS	NS	NS	NS	<0.50	NS	NS	NS
Tetrachloroethene	μg/L	<1.0	NS	<1.0	<1.0	<1.0	9.0	9.0	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS
Toluene*	μg/L	<1.0	NS	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS
trans-1.2-Dichloroethene	μg/L	<1.0	NS	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS
trans-1,3-Dichloropropene	μg/L	<1.0	NS	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS
Trichlorethene	μg/L	<1.0	NS	<1.0	<1.0	<1.0	200D	200D	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS
Vinyl Acetate	μg/L	<1.0	NS	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS
Vinyl Chloride	μg/L	<1.0	NS	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS	NS	NS	NS	<1.0	NS	NS	NS
Total VOCs	μg/L	0	NA	0	0	0	213.54	213.61	NA	NA	NA	NA	NA	NA	0	NA	NA	NA
Other Analyses																		
Chloride	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	21	NS	18	17
Iron (Total)	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.54B	NS	NS	NS
Manganese by ICP (Total)	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0054J	NS	NS	NS
Total Dissolved Solids	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	92	NS	NS	NS
Total Suspended Solids	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4.4	NS	NS	NS
рН	pH Units	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	6.8	NS	NS	NS

Notes-

(MQL)

J - estimated value

NS - Not sampled for particular analyte

ND - Not detected above the MQL

R - rejected result to due reason code listed

* Not included in calculation of total VOCs - assumed to be a

laboratory artifact, anomalous or not a site contaminant of concern (1) - Rinsate blank contamination and original result less than reporting

(2) - MS/MSD recoveries outside QC limits

(3) - Holding time exceeded

(4) - Rinsate blank and/or trip blank contamination

Table 9 Groundwater Analytical Results Page 3 of 6

Table 9 Groundwater Analytical Results April 2016 Semi-Annual and Annual Sampling Event

SJCC/GSC Superfund Site

							53007	SC Superfun	iu bite									
		MONITORI	NG WELLS			•	•				1			•		•		
Well ID		OW-14	OW-16I	OW-16D	OW-17	OW-18I	OW-18D	OW-19I	OW-19D	OW-20	OW-21	OW-22	OW-23	OW-24	OW-25	OW-26	DUP02	OW-27
Sample Depth (ft)		109	85	113	112	82.5	117	80	112.5	117.5	142.5	102.5	107	112	112	12	20	147
Sample Date		4/8/16	4/8/16	4/8/16	4/8/16	4/11/16	4/11/16	4/6/16	4/6/16	4/12/16	4/7/16	4/12/16	4/12/16	4/12/16	4/11/16	4/7	//16	4/7/16
Analyte	Units																	
Volatile Organic Compounds by	v Method 8260B																	
1.1.1-Trichloroethane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	μg/L	<1.0	<1.0	<1.0	<1.0	0.53J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone	μg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Chloroethyl vinyl ether*	μg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	μg/L	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0
4-Methyl-2-pentanone	μg/L	<5.0 <10	<5.0	<5.0 <10	<5.0	<5.0 <10	<5.0 <10	<5.0 <10	<5.0 <10	<5.0 <10	<5.0	<5.0 <10	<5.0 <10	<5.0 <10	<5.0 <10	<5.0 <10	<5.0	<5.0 <10
Acetone*	μg/L μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzene* Bromodichloromethane*	μg/L μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform*	μg/L μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	μg/L μg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon disulfide	μg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon tetrachloride*	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	μg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chloroethane	μg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chloroform*	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.72J
cis-1,3-Dichloropropene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane*	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene*	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl-tert-butyl ether*	μg/L	<0.50 <5.0	<0.50 <5.0	1.0J <5.0	1.1J <5.0	3.1J <5.0	2.1J <5.0	0.45J <5.0	<0.50 <5.0	0.83J <5.0	<0.50	<0.50 <5.0	0.91J <5.0	<0.50 <5.0	<0.50 <5.0	0.59J <5.0	0.83J <5.0	0.64J
Methylene Chloride	μg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0 <0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0 <0.50
Xylenes (Total)	μg/L μg/L	< 0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	< 0.50	< 0.50	<0.50	<0.50	< 0.50	<0.50	<0.50	<0.50	<0.50	< 0.50
Styrene* Tetrachloroethene	μg/L μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	<1.0	<1.0	5.6	8.2	<1.0	<1.0	16	14	12
Toluene*	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1.2-Dichloroethene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorethene	μg/L	<1.0	<1.0	<1.0	4.8	<1.0	<1.0	<1.0	0.55J	<1.0	10	4.4	22	<1.0	<1.0	2.7	2.6	2.6
Vinyl Acetate	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl Chloride	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total VOCs	μg/L	0	0	0	4.8	0.53	0	0	1.65	0	10	10	30.2	0	0	18.7	16.6	15.32
Other Analyses																		
Chloride	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Iron (Total)	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Manganese by ICP (Total)	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Total Dissolved Solids	mg/L	NS	NS	NS NG	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS NG
Total Suspended Solids	mg/L	NS	NS	NS NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS NS
pΗ	pH Units	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes-

(MQL)

J - estimated value

NS - Not sampled for particular analyte

ND - Not detected above the MQL

R - rejected result to due reason code listed

* Not included in calculation of total VOCs - assumed to be a

laboratory artifact, anomalous or not a site contaminant of concern (1) - Rinsate blank contamination and original result less than reporting

(2) - MS/MSD recoveries outside QC limits

(3) - Holding time exceeded

(4) - Rinsate blank and/or trip blank contamination

Table 9 Groundwater Analytical Results April 2016 Semi-Annual and Annual Sampling Event

SJCC/GSC	Superfund Site	
D0 C C/ GD C	Duperruna Dice	

Well ID		MONITORI	NG WELLS															
Well ID																		
		OW-28	OW-30	OW-32	OW-33	OW-34	OW-35I	OW-35D	OW-37	OW-38	OW-39	OW-40	OW-41	OW-42	OW-43	OW-44	OW-45	OW-105
Sample Depth (ft)		150	165	183	193	170	125	190	140	140	168	178	33.35	32.3	34.40	33.25	33.45	60
Sample Date		4/7/16	4/8/16	4/6/16	4/6/16	4/13/16	4/5/16	4/6/16	4/7/16	4/12/16	4/11/16	4/11/16	4/15/16	4/13/16	4/13/16	4/4/16	4/4/16	4/14/16
Analyte	Units																	
Volatile Organic Compounds by M	Method 8260R																	
1.1.1-Trichloroethane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone	μg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Chloroethyl vinyl ether*	μg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	μg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	< 5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Methyl-2-pentanone	μg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Acetone*	μg/L	<10	<10	<10 6.8	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene*	μg/L μg/L	<1.0 <1.0	<1.0 <1.0	<1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0
Bromodichloromethane* Bromoform*	μg/L μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.1
Bromomethane	μg/L μg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon disulfide	μg/L μg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon tetrachloride*	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	μg/L	< 0.50	< 0.50	< 0.50	<0.50	< 0.50	< 0.50	< 0.50	<0.50	< 0.50	< 0.50	< 0.50	<0.50	<0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chloroethane	μg/L	<5.0	< 5.0	<5.0	<5.0	< 5.0	<5.0	< 5.0	<5.0	< 5.0	< 5.0	< 5.0	<5.0	< 5.0	<5.0	<5.0	<5.0	<5.0
Chloroform*	μg/L	<1.0	<1.0	<1.0	<1.0	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.55J
Chloromethane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	0.73J	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane*	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.45J
Ethylbenzene*	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl-tert-butyl ether*	μg/L	0.42J	< 0.50	< 0.50	< 0.50	<0.50	< 0.50	< 0.50	0.84J	2.2J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.53J
Methylene Chloride	μg/L	<5.0 <0.50	<5.0 <0.50	<5.0	<5.0 <0.50	<5.0 <0.50	<5.0 <0.50	<5.0	<5.0 <0.50	<5.0 <0.50	<5.0 <0.50	<5.0 <0.50	<5.0 <0.50	<5.0 <0.50	<5.0	<5.0 <0.50	<5.0 <0.50	<5.0
Xylenes (Total)	μg/L	<0.50	<0.50	<0.50 <0.50	<0.50	<0.50	<0.50	<0.50 <0.50	<0.50	<0.50	< 0.50	<0.50	<0.50	< 0.50	<0.50 <0.50	<0.50	<0.50	<0.50 <0.50
Styrene*	μg/L μg/L	8.0	4.9	<1.0	<1.0	<1.0	4.2	4.0	<1.0	<1.0	<1.0	60	2.4	<1.0	<1.0	<1.0	9.6	<1.0
Tetrachloroethene Toluene*	μg/L μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	<u>μg/L</u> μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorethene	μg/L	9.0	4.1	1.1	<1.0	<1.0	<1.0	3.5	5.7	<1.0	<1.0	37	39	1.2	<1.0	<1.0	<1.0	<1.0
Vinyl Acetate	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl Prectate Vinyl Chloride	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total VOCs	μg/L	17	9	1.1	0	0	4.2	7.5	5.7	0	0	99.2	42.13	1.2	0	0	9.6	0
Other Analyses																		
Chloride	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	17
Iron (Total)	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.025J
Manganese by ICP (Total)	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.012
Total Dissolved Solids	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	75
Total Suspended Solids	mg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1.0
На	pH Units	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.0

Notes-

(MQL)

J - estimated value

NS - Not sampled for particular analyte

ND - Not detected above the MQL

R - rejected result to due reason code listed

* Not included in calculation of total VOCs - assumed to be a

laboratory artifact, anomalous or not a site contaminant of concern (1) - Rinsate blank contamination and original result less than reporting

limit

(2) - MS/MSD recoveries outside QC limits

(3) - Holding time exceeded

(4) - Rinsate blank and/or trip blank contamination

Table 9 Groundwater Analytical Results

Table 9

Groundwater Analytical Results April 2016 Semi-Annual and Annual Sampling Event SJCC/GSC Superfund Site

		MONITORING	WELL.	SJCC/G	SC Superfund	1 Site	RESI	DENTIAL W	ELLS			
Well ID		OW-106	OW-107	R108	R1731	R1739	R1830	R2973	R3008	R3017	R3024	R3495
Sample Depth (ft)		60	60	NA NA	NA	NA	NA	NA	NA	NA	NA	NA NA
Sample Date		4/14/16	4/14/16	4/11/16	4/11/16	4/11/16	4/11/16	4/11/16	4/13/16	4/11/16	4/11/16	4/13/16
Analyte	Units				.,,	.,,	.,,					
Volatile Organic Compounds b												
1.1.1-Trichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone	μg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Chloroethyl vinyl ether*	μg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	μg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
4-Methyl-2-pentanone	μg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Acetone*	μg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzene*	μg/L	<1.0	<1.0	21	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.8	<1.0
Bromodichloromethane*	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform*	μg/L	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	μg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon disulfide	μg/L	<2.0	< 2.0	< 2.0	<2.0	<2.0	<2.0	5.4	<2.0	< 2.0	< 2.0	< 2.0
Carbon tetrachloride*	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	μg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chloroethane	μg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chloroform*	μg/L	0.56J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane*	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene*	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl-tert-butyl ether*	μg/L	0.57J	0.37J	<0.50	< 0.50	< 0.50	< 0.50	0.54J	< 0.50	< 0.50	<0.50	1.7J
Methylene Chloride	μg/L	<5.0 <0.50	<5.0 <0.50	<5.0 0.42J	<5.0 <0.50	<5.0 <0.50	<5.0 <0.50	<5.0 <0.50	<5.0 <0.50	<5.0 <0.50	<5.0 <0.50	<5.0 <0.50
Xylenes (Total)	μg/L	<0.50	<0.50	<0.50	<0.50	< 0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Styrene*	μg/L	<0.30	<1.0	6.1	2.2	<1.0	<1.0	<1.0	<1.0	<0.30	<0.30	<0.30
Tetrachloroethene	μg/L μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene*	μg/L μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	μg/L μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorethene Vinyl Acetate	μg/L μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl Acetate Vinyl Chloride	μg/L μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total VOCs	μg/L μg/L	0	0	6.52	2.2	0	0	5.4	0	0	0	0
Other Analyses		· ·	<u> </u>	0.52	2,2	<u> </u>	<u> </u>	J.7	U U	, v	, v	U U
Chloride	mg/L	17	22	NS	NS	NS	NS	NS	NS	NS	NS	NS
Iron (Total)	mg/L	0.091	0.033J	NS	NS	NS	NS	NS	NS	NS	NS	NS
Manganese by ICP (Total)	mg/L	0.0055J	0.022	NS	NS	NS	NS	NS	NS	NS	NS	NS
Total Dissolved Solids	mg/L	76	89	NS	NS	NS	NS	NS	NS	NS	NS	NS
Total Suspended Solids	mg/L	2.7	2.2	NS	NS	NS	NS	NS	NS	NS	NS	NS
pH	pH Units	4.8	5.1	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes-

(MQL)

J - estimated value

NS - Not sampled for particular analyte

ND - Not detected above the MQL

R - rejected result to due reason code listed

* Not included in calculation of total VOCs - assumed to be a

laboratory artifact, anomalous or not a site contaminant of concern (1) - Rinsate blank contamination and original result less than reporting

limit

(2) - MS/MSD recoveries outside QC limits

(3) - Holding time exceeded

(4) - Rinsate blank and/or trip blank contamination

Table 10 Detected Analytes in QA/QC Samples SJCC/GSC Superfund Site January - June 2016

	Sample ID & Date	Trip Blank-010616			Trip Blank-012816			Trip Blank-021116			Trip Blank- 030816	Trip Blank- 031516	Trip Blank- 032316
	Sample Date	1/6/16	1/14/16	1/20/16	1/28/16	2/4/16	2/18/16	2/11/16	2/18/16	3/2/16	3/8/16	3/15/16	3/23/16
	Sample Event	System O&M	System O&M	System O&M	System O&M	System O&M	System O&M	System O&M	System O&M	System O&M	System O&M	System O&M	System O&M
Analyte	Units												
Volatile Organic Compounds	by Method 8260B												
1,1-Dichloroethene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	μg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Disulfide	μg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	μg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	μg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.50	< 0.50
Methvl-tert-butyl ether	μg/L	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.44J	< 0.50	< 0.50	< 0.50	< 0.50	NA	NA
Tetrachloroethene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorethene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Other Analyses													
Chloride	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	mg/L	NA	NA	NA	NA	NA	< 0.05	NA	NA	NA	NA	NA	NA
Manganese	mg/L	NA	NA	NA	NA	NA	0.027	NA	NA	NA	NA	NA	NA
Total Dissolved Solids	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
рН	pH Units	NA	NA	NA	NA	NA	5.0	NA	NA	NA	NA	NA	NA

	Sample ID & Date	Trip Blank-033116	Trip Blank-040416	Field Duplicate- TET 040416	Trip Blank-041116	Trip Blank-042116	Trip Blank-042716	Trip Blank-050516	Trip Blank-051116	Trip Blank-051916	Trip Blank- 052316	Trip Blank- 060116	Field Duplicate - ALPC2 060916
	Sample Date	3/31/16	4/4/16	4/4/16	4/11/16	4/21/16	4/27/16	5/5/16	5/11/16	5/19/16	5/23/16	6/1/16	6/9/16
	Sample Event	System O&M	System O&M	System O&M	System O&M	System O&M	System O&M	System O&M	System O&M	System O&M	System O&M	System O&M	System O&M
Analyte	Units												
Volatile Organic Compounds	s by Method 8260B												
1,1-Dichloroethene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	μg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Disulfide	μg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	μg/L	<1.0	<1.0	0.50J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	μg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methvl-tert-butyl ether	μg/L	< 0.50	< 0.50	0.51J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.42J
Methylene Chloride	μg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorethene	μg/L	<1.0	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Other Analyses													
Chloride	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	mg/L	NA	NA	< 0.05	NA	NA	NA						
Manganese	mg/L	NA	NA	0.021	NA	NA	NA						
Total Dissolved Solids	mg/L	NA	NA	83	NA	NA	NA						
рН	pH Units	NA	NA	5.2	NA	NA	NA						

Notes

 \boldsymbol{Bold} - denotes analyte detected above method quantitation limit

NA - Not analyzed for particular analyte

DUP and FD - Field Duplicate

Semi-Annual GW - The April 2015 semi-annual, annual and biennial groundwater sampling event

System O&M - Treatment plant operations and maintenance sampling events

(1) Rinsate blank contamination

Table 10 Detected Analytes in QA/QC Samples SJCC/GSC Superfund Site January - June 2016

	Sample ID & Date	Trip Blank-060916		Trip Blank-062916	TB2 - 041416	TB - 041416	TB2 - 041316	TB02 - 041316	EB-041216	TB2 - 041116	Trip Blank- 040816	EB-041416	DUP01-040516 NMW1S
	Sample Date	6/9/16	6/23/16	6/29/16	4/14/16	4/14/16	4/13/16	4/13/16	4/12/16	4/11/16	4/8/16	4/14/16	4/5/16
	Sample Event	System O&M	System O&M	System O&M	Annual-GW	Annual-GW	Annual-GW	Annual-GW	Annual-GW	Annual-GW	Annual-GW	Annual-GW	Annual-GW
Analyte	Units												
Volatile Organic Compounds	by Method 82608												
1,1-Dichloroethene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	μg/L	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon Disulfide	μg/L	NA	NA	NA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloroform	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.1
Dibromochloromethane	μg/L	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methvl-tert-butyl ether	μg/L	< 0.50	NA	NA	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.36J
Methylene Chloride	μg/L	NA	< 0.50	< 0.50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	9.0
Trichlorethene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	200D
Other Analyses													
Chloride	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5M	NA
Iron	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.03J	NA
Manganese	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.003	NA
Total Dissolved Solids	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	180	NA
pН	pH Units	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

	Sample ID & Date	DUP02-040716 OW26	DUP04-041316 EW-16	DUP03-041316 EWS-5	DUP04-041416 OW-106	TB-040716	TB-041116	TB2-041116	EB-040416	Trip Blank-040516	Trip Blank- 040616	EB-040716
	Sample Date	4/7/16	4/13/16	4/13/16	4/14/16	4/7/16	4/11/16	4/11/16	4/4/16	4/5/16	4/6/16	4/7/16
	Sample Event	Annual-GW	Annual-GW	Annual-GW	Annual-GW	Annual-GW	Annual-GW	Annual-GW	Annual-GW	Annual-GW	Annual-GW	Annual-GW
Analyte	Units											
Volatile Organic Compounds	s by Method 82608											
1,1-Dichloroethene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzene	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon Disulfide	μg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloroform	μg/L	<1.0	<1.0	<1.0	0.56J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	μg/L	<1.0	4.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	μg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methvl-tert-butyl ether	μg/L	0.83J	< 0.50	< 0.50	0.53J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Methylene Chloride	μg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	μg/L	14	1.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorethene	μg/L	2.6	6.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Other Analyses												
Chloride	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	mg/L	NA	NA	NA	0.085	NA	NA	NA	NA	NA	NA	NA
Manganese	mg/L	NA	NA	NA	0.0055J	NA	NA	NA	NA	NA	NA	NA
Total Dissolved Solids	mg/L	NA	NA	NA	81	NA	NA	NA	NA	NA	NA	NA
рН	pH Units	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes

 \boldsymbol{Bold} - denotes analyte detected above method quantitation limit

NA - Not analyzed for particular analyte

DUP and FD - Field Duplicate

Semi-Annual GW - The April 2015 semi-annual, annual and biennial groundwater sampling event

System O&M - Treatment plant operations and maintenance sampling events

(1) Rinsate blank contamination

Table 11 Groundwater Elevations for Monitoring Wells SJCC/GSC Superfund Site January - June 2016

			1/22/2	2016	5/25/	2016	5/26/2016			
			Pumping C	Conditions	Pumping (Conditions	Non-Pumping	g Conditions		
Well ID				Groundwater		Groundwater		Groundwater		
	Screened Interval	Reference Elevation	Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevation		
	(ft bgs)	(ft amsl)	(ft below ref. el.)	(ft amsl)	(ft below ref. el.)	(ft amsl)	(ft below ref. el.)	(ft amsl)		
SJCC-1	25-45	124.91	NM	NM	25.70	99.21	25.60	99.31		
SJCC-2	21-41	125.22	NM	NM	26.45	98.77	26.10	99.12		
SJCC-5	26-46	125.24	NM	NM	26.40	98.84	26.25	98.99		
SJCC-6	23-43	122.57	NM	NM	24.05	98.52	24.06	98.51		
SJCC-7	25-45	126.4	NM	NM	27.40	99.00	27.41	98.99		
SJCC-8	25-45	126.18	NM	NM	25.65	100.53	25.70	100.48		
SJCC-10	27-47	120.72	NM	NM	22.88	97.84	22.86	97.86		
SJCC-11	27-47	124.79	NM	NM	26.28	98.51	26.30	98.49		
NJ-2	14-34	117.57	NM	NM	20.12	97.45	20.10	97.47		
DMW-1I	104-114	126.35	NM	NM	26.76	99.59	26.71	99.64		
DMW-2D	220-230	126.17	NM	NM	26.65	99.52	26.87	99.30		
DMW-3I	96-106	119.37	NM	NM	20.86	98.51	20.88	98.49		
DMW-4D	211-221	120.49	NM	NM	22.82	97.67	22.75	97.74		
DMW-5D	220-230	121.46	NM	NM	23.78	97.68	23.36	98.10		
EP-1S	29-44	126.54	NM	NM	27.30	99.24	27.27	99.27		
EP-3S	23-38	123.57	NM	NM	25.00	98.57	25.02	98.55		
EP-5S	18-33	116.94	NM	NM	19.02	97.92	19.03	97.91		
EP-7S	22-37	116.06	NM	NM	19.74	96.32	19.62	96.44		
EP-2I	90-110	126.33	NM	NM	27.42	98.91	27.46	98.87		
EP-6I	90-110	121.65	NM	NM	22.94	98.71	22.72	98.93		
EP-11I	112-137	115.76	NM	NM	19.44	96.32	19.25	96.51		
EP-13I	95-121	103.03	NM	NM	9.02	94.01	9.02	94.01		
EP-14I	102-127	111.44	NM	NM	14.70	96.74	14.56	96.88		
EP-8D	197-222	126.29	NM	NM	27.85	98.44	27.85	98.44		
EP-10D	187-212	103.85	NM	NM	12.62	91.23	11.35	92.50		
NMW-1S	21-31	128.89	27.21	101.68	26.57	102.32	26.29	NM		
NMW-2I	105-115	117.15	17.28	99.87	16.68	100.47	16.69	100.46		
NMW-2S	21-31	117.15	17.09	100.06	16.40	100.75	16.41	100.74		
NMW-3I	86-96	115.05	16.03	99.02	15.78	99.27	15.92	99.13		
NMW-3S	18-28	115.14	15.80	99.34	15.50	99.64	15.55	99.59		
OW-1	88-103	116.54	15.96	100.58	15.40	101.14	15.62	100.92		
OW-2	84.5-99.5	NM	NM	NM	NM	NM	NM	NM		
OW-3	85-100	114.34	13.29	101.05	12.74	101.60	13.11	101.23		
OW-4	85-100	115.44	14.70	100.74	14.23	101.21	14.78	100.66		
OW-10	26-36	115.39	14.83	100.56	14.38	101.01	15.12	100.27		
OW-11	26-36	114.84	14.11	100.73	13.70	101.14	14.57	100.27		
OW-12	21-31	112.07	17.66	94.41	17.21	94.86	17.65	94.42		
OW-13	26-36	111.41	10.35	101.06	9.95	101.46	10.76	100.65		
OW-14	69.5-119.5	109.69	NM	NM	14.81	94.88	14.56	95.13		
OW-15	109-124	109.57	NM	NM	14.61	94.96	14.44	95.13		

Notes

ft bgs - feet below ground surface ft amsl - feet above mean sea level

ft below ref. el. - feet below reference elevation

NM - not measured NA - not accessible Shallow (<70 ft bgs)
Intermediate (70 to 130 ft bgs)
Deep (>130 ft bgs)

Extraction well pumps were turned off for approximately 23 hours prior to measurement of water table elevations in monitoring wells.

Table 11 Groundwater Elevations for Monitoring Wells SJCC/GSC Superfund Site January - June 2016

			1/22/2	2016	5/25/2	2016	5/26/2	2016
			Pumping C	Conditions	Pumping (Conditions	Non-Pumping	g Conditions
Well ID				Groundwater		Groundwater		Groundwater
	Screened Interval	Reference Elevation	Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevation
	(ft bgs)	(ft amsl)	(ft below ref. el.)	(ft amsl)	(ft below ref. el.)	(ft amsl)	(ft below ref. el.)	(ft amsl)
OW-16I	70-90	110.45	NM	NM	15.46	94.99	15.05	95.40
OW-16D	108-118	110.46	NM	NM	15.40	95.06	15.06	95.40
OW-17	107-117	107.23	NM	NM	12.10	95.13	11.86	95.37
OW-18I	75-90	104.99	NM	NM	10.78	94.21	10.75	94.24
OW-18D	112-122	104.96	NM	NM	10.82	94.14	10.71	94.25
OW-19I	75-85	102.83	NM	NM	8.61	94.22	8.65	94.18
OW-19D	105-120	102.77	NM	NM	8.64	94.13	8.61	94.16
OW-20	110-125	114.97	NM	NM	20.27	94.70	19.18	95.79
OW-21	135-150	120.07	NM	NM	23.67	96.40	23.26	96.81
OW-22	95-110	117.38	NM	NM	19.47	97.91	19.42	97.96
OW-23	97-117	118.38	NM	NM	22.66	95.72	22.05	96.33
OW-24	97-117	116.9	NM	NM	21.18	95.72	20.58	96.32
OW-25	95-115	118.35	NM	NM	20.51	97.84	20.45	97.90
OW-26	108.5-123.5	124.4	NM	NM	27.42	96.98	27.22	97.18
OW-27	133-148	117.64	NM	NM	21.64	96.00	20.60	97.04
OW-28	145-155	116.82	NM	NM	23.47	93.35	22.46	94.36
OW-30	155-175	103.7	NM	NM	13.67	90.03	9.88	93.82
OW-32	165-185	99.7	NM	NM	8.44	91.26	8.22	91.48
OW-33	178-198	103.06	NM	NM	11.90	91.16	11.78	91.28
OW-34	165-185	112.59	NM	NM	17.63	94.96	17.27	95.32
OW-35I	115-135	101.83	NM	NM	8.66	93.17	8.67	93.16
OW-35D	180-200	101.85	NM	NM	10.39	91.46	8.80	93.05
OW-37	135-155	115.45	NM	NM	20.74	94.71	19.57	95.88
OW-38	135-155	115.93	NM	NM	20.22	95.71	19.58	96.35
OW-39	158-178	102.9	NM	NM	11.35	91.55	10.02	92.88
OW-40	166-188	101.13	NM	NM	8.00	93.13	7.39	93.74
OW-41	25-35	124.74	NM	NM	25.36	99.38	24.97	99.77
OW-42	26.5-36.5	125.17	NM	NM	25.97	99.20	25.55	99.62
OW-43	26.5-36.5	125.48	NM	NM	26.17	99.31	25.87	99.61
OW-44	25-35	125.46	NM	NM	26.31	99.15	26.30	99.16
OW-45	25-35	124.92	NM	NM	25.93	98.99	25.95	98.97
OW-101	30-50	111.97	10.31	101.66	9.94	102.03	11.02	100.95
OW-102	25-50	111.56	9.95	101.61	9.42	102.14	10.65	100.91
OW-103	24.5-49.5	112.3	10.49	101.81	10.16	102.14	11.36	100.94
OW-104	25-50	114.06	12.35	101.71	12.08	101.98	13.18	100.88
OW-105	45-70	117.77	16.14	101.63	15.91	101.86	17.17	100.60
OW-106	45-70	118.26	16.41	101.85	16.08	102.18	17.64	100.62
OW-107	45-70	114.86	13.51	101.35	13.12	101.74	14.08	100.78

Notes

ft bgs - feet below ground surface ft amsl - feet above mean sea level

ft below ref. el. - feet below reference elevation

NM - not measured NA - not accessible



Extraction well pumps were turned off for approximately 23 hours prior to measurement of water table elevations in monitoring wells.

Table 12
Groundwater Elevations for Extraction Wells
SJCC/GSC Superfund Site
January - June 2016

			5/26/2	016	5/25/2	
			Non-Pumping	Conditions	Pumping C	Conditions
	Screened Interval	Reference Elevation	Depth to Water	Groundwater Elevation	Depth to Water	Groundwater Elevation
Well ID	(ft bgs)	(ft amsl)	(ft below ref. el.)	(ft amsl)	(ft below ref. el.)	(ft amsl)
EWS-1	36-56	126.2	NA	NA	NA	NA
EWS-2	36-56	125.00	NM	NM	NM	NM
EWS-3	37.5-57.5	126.20	29.40	96.80	29.42	96.78
EWS-4	39-59	125.30	26.38	98.92	26.38	98.92
EWS-5	36-76	120.90	22.88	98.02	22.86	98.04
EWS-6	34-74	119.20	22.18	97.02	22.16	97.04
EWI-7	58-108	117.70	20.11	97.59	20.19	97.51
EWI-8	63-113	116.60	NA	NA	NA	NA
EWI-9	66.5-116.5	117.90	NA	NA	NA	NA
EWI-10	68-118	117.40	22.75	94.65	23.08	94.32
EWI-11	73-123	111.20	24.79	86.41	78.62	32.58
EWI-12	76-126	111.30	16.48	94.82	16.90	94.40
EW-12A	140-160	111.14	15.74	95.40	32.35	78.79
EWI-13	71.9-121.9	110.20	NA	NA	NA	NA
EWS-14	38-58	125.97	27.46	98.51	27.68	98.29
EWS-15	38-58	124.77	35.04	89.73	35.22	89.55
EW-16	95-115	118.62	25.01	93.61	25.10	93.52
EW-17	30-45	122.90	30.00	92.90	30.00	92.90
EW-18	155-175	103.42	6.07	97.35	27.27	76.15
EW-20	30-45	125.03	23.35	101.68	26.82	98.21
EW-21	105-125	115.18	37.35	77.83	60.36	54.82

Notes

NA - not applicable; well permanently offline

NM - not measured - bad transducer

ft bgs - feet below ground sufrace

ft amsl - feet above mean sea level

ft below ref el. - feet below site elevation

Shading indicates a pumping well

Note: Reference datum for extraction wells 1 through 13 is NGVD 1929.

* Reference elevation resurveyed on July 13, 2004. Reference datum NGVD 1988.

APPENDIX A SAMPLING AND WATER LEVEL SCHEDULE

Table A-1 Monthly Sampling Schedule SJCC/GSC Superfund Site January through December 2016

LOCATION	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
GROUNDWATER TREATMENT S	YSTE							U				
Equalization Tank	X	X	X	X	X	X	X	X	X	X	X	X
Effluent Holding Tank	X	X	X	X	X	X	X	X	X	X	X	X
Efficiency Samples (5 locations)	X	X	X	X	X	X	X	X	X	X	X	X
Plant Vent Gas System	21	21	7.	71	71	21	21	71	71	21	21	2.
	1 1	1 A	1 A	1 1	1 A	1 A	1 A	1 1	1 1	1 A	1 A	1 A
Air Stream Monitoring (4 locations)	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A
Air Stream Sampling (4 locations)		AS			AS			AS			AS	
MONITORING WELLS					r				1			
SJCC-1				gs								
SJCC-2				gs								
SJCC-5				gs								
SJCC-6				gs						gs		
SJCC-8				gs								
SJCC-10				gs						gs		
SJCC-11				gs								
NJ-2												
DMW-5D				gs								
EP-6I				gs						gs		
EP-13I				gs								
SJCC-1				gs								
DMW-1I				gs								
DMW-3I				gs								
EP-1S				gs								
EP-2I				gs								
EP-11I				gs								
EP-14I				gs								
DMW-2D				gs								
DMW-4D												
EP-8D				gs								
EP-10D												
NJ-1												
NJ-1A												
NMW-1S				gs								
NMW-2S												
NMW-2I												
NMW-3S												
NMW-3I												
OW-1				gs						gs		
OW-2				gs						gs		
OW-3				gs						gs		
OW-4				gs						gs		
OW-14				gs								
OW-15				gs								
OW-16I				gs								
OW-16D				gs								
OW-17				gs								
OW-18I				gs								

Table A-1 Monthly Sampling Schedule SJCC/GSC Superfund Site January through December 2016

LOCATION	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
OW-18D				gs								
OW-19I				gs								
OW-19D				gs								
OW-20				gs								
OW-21				gs								
OW-22				gs						gs		
OW-23				gs						gs		
OW-24				gs								
OW-25				gs						gs		
OW-26				gs								
OW-27				gs						gs		
OW-28				gs						gs		
OW-30				gs						gs		
OW-32				gs						gs		
OW-33				gs						gs		
OW-34				gs						gs		
OW-35I				gs						gs		
OW-35D				gs						gs		
OW-37				gs						gs		
OW-38				gs						gs		
OW-39										gs		
OW-40										gs		
OW-41				gs								
OW-42				gs								
OW-43				gs								
OW-44				gs								
OW-45				gs								
OW-105				gs						gs		
OW-106				gs						gs		
OW-107				gs						gs		
R108				gs						gs		
R1601 ¹⁰												
R1615 ¹⁰												
R1731				gs						gs		
R2960 ¹⁰												
R1739				gs						gs		
R1830				gs						gs		
R3024				gs						gs		
R3017				gs						gs		
R2973				gs						gs		
R3495				gs						gs		
R3008				gs						gs		

Table A-1 Monthly Sampling Schedule SJCC/GSC Superfund Site January through December 2016

LOCATION	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
EXTRACTION WELLS												
EWS-1				gs						gs		
EWS-2				gs								
EWS-3				gs						gs		
EWS-4				gs								
EWS-5				gs								
EWS-6				gs								
EWI-7				gs								
EWI-8				gs								
EWI-10				gs								
EWI-11				gs								
EWI-12				gs						gs		
EW-12A				gs						gs		
EWI-13												
EWS-14				gs								
EWS-15				gs						gs		
EW-16				gs						gs		
EW-17				gs						gs		
EW-18				gs						gs		
EW-20				gs						gs		
EW-21				gs						gs		

Notes:

- 1. gs: Groundwater Sample
- 2. X: Water Sample
- 3. 1A: Process Air Stream Monitoring (every week)
- 4. AS: Air Sample
- 5. Plant Efficiency Samples: Samples are collected at the following locations -after the clarifier, after the sand filters, after the 1st air stripper, after the 2nd air stripper, in between the liquid phase carbon units.
- 6. Plant Vent Gas System Monitoring and Sampling: Monitoring and sampling occurs at the following locations -vent gas from the plant prior to the vapor phase carbon units, between unit no. 1 and unit no. 2, between unit no. 3 and unit no. 4, the stack emissions.
- 7. Refer to SAP for the sampling parameters and analytical methods.
- 8. Refer to SAP for well locations.
- $9.\ Refer to\ Table\ 4-2\ for\ applicable\ analytical\ methods.$
- 10. Residential wells not sampled for the reasons detailed below.
- R1601: System off. Hole in water tank.
- R1615: Piping removed and no means to sample. Currently a sprinkler system.
- R2960: House vacant and electric turned off.

Table A-2 Monthly Water Level Schedule SJCC/GSC Superfund Site January through December 2016

LOCATION	Jan	Feb	Mar	Apr	Mav	Jun	Jul	Aug	Sept	Oct	Nov	Dec
MONITORING WELLS					.			8				
SJCC-1						p, np				p, np		
SJCC-2						p, np				p, np		
SJCC-5						p, np				p, np		1
SJCC-6						p, np				p, np		+
SJCC-7						p, np				p, np		†
SJCC-8						p, np				p, np		†
SJCC-10						p, np				p, np		†
SJCC-11						p, np				p, np		†
NJ-2						p, np				p, np		†
NJ-4						p, np				p, np		
DMW-1I						p, np				p, np		
DMW-2D						p, np				p, np		
DMW-3I						p, np				p, np		†
DMW-4D						p, np				p, np		
DMW-5D						p, np				p, np		+
EP-1S						p, np				p, np		†
EP-3S						p, np				p, np		+
EP-5S						p, np				p, np		†
EP-7S						p, np				p, np		+
EP-2I						p, np				p, np		+
EP-6I						p, np				p, np		+
EP-11I						p, np				p, np		+
EP-13I						p, np				p, np		+
EP-14I						p, np				p, np		1
EP-8D						p, np				p, np		1
EP-10D						p, np				p, np		+
NMW-1S			р			p, np			р	p, np		1
NMW-2S			p			p, np			р	p, np		1
NMW-2I			р			p, np			р	p, np		
NMW-3S			p			p, np				p, np		
NMW-3I			р			p, np			р	p, np		
OW-1			p			p, np			р	p, np		
OW-3			p			p, np			p	p, np		
OW-4			p			p, np			р	p, np		
OW-10			p			p, np			р	p, np		
OW-11			р			p, np			р	p, np		
OW-12		l	p			p, np		l	р	p, np		1
OW-13			р			p, np			р	p, np		1
OW-14			ľ			p, np			ľ	p, np		1
OW-15						p, np				p, np		

Table A-2 Monthly Water Level Schedule SJCC/GSC Superfund Site January through December 2016

LOCATION	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
OW-16I						p, np				p, np		
OW-16D						p, np				p, np		
OW-17						p, np				p, np		
OW-18I						p, np				p, np		
OW-18D						p, np				p, np		
OW-19I						p, np				p, np		
OW-19D						p, np				p, np		
OW-20						p, np				p, np		
OW-21						p, np				p, np		
OW-22						p, np				p, np		
OW-23						p, np				p, np		
OW-24						p, np				p, np		
OW-25						p, np				p, np		
OW-26						p, np				p, np		
OW-27						p, np				p, np		
OW-28						p, np				p, np		
OW-30						p, np				p, np		
OW-32						p, np				p, np		
OW-33						p, np				p, np		
OW-34						p, np				p, np		
OW-35I						p, np				p, np		
OW-35D						p, np				p, np		
OW-37						p, np				p, np		
OW-38						p, np				p, np		
OW-39						p, np				p, np		
OW-40						p, np				p, np		
OW-41						p, np				p, np		
OW-42						p, np				p, np		
OW-43						p, np				p, np		
OW-44						p, np				p, np		
OW-45						p, np				p, np		
OW-101			p			p, np			p	p, np		
OW-102			p			p, np			p	p, np		
OW-103			p			p, np			p	p, np		
OW-104			p			p, np			p	p, np		
OW-105			p			p, np			p	p, np		
OW-106			p			p, np			p	p, np		
OW-107			р			p, np			р	p, np		

Table A-2 Monthly Water Level Schedule SJCC/GSC Superfund Site January through December 2016

LOCATION	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
EXTRACTION WELLS				_								
EWS-1												
EWS-2			р			p, np			р	p,np		
EWS-3			p			p, np			p	p,np		
EWS-4			p			p, np			p	p,np		
EWS-5			p			p, np			p	p,np		
EWS-6			p			p, np			p	p,np		
EWI-7			p			p, np			p	p,np		
EWI-8												
EWI-10			p			p, np			p	p,np		
EWI-11			p			p, np			p	p,np		
EWI-12			p			p, np			p	p,np		
EW-12A			p			p, np			p	p,np		
EWI-13												
EWS-14			p			p, np			p	p,np		
EWS-15			p			p, np			p	p,np		
EW-16			p			p, np			p	p,np		
EW-17			p			p, np			p	p,np		
EW-18			p			p, np			p	p,np		
EW-20			p			p, np			p	p,np		
EW-21			p			p, np			p	p,np		
INJECTION WELLS												
IW-8			p			p, np			p	p,np		
IW-9			p			p, np			p	p,np		
IW-10			p			p, np			p	p,np		
IW-13			p			p, np			p	p,np		
IW-14			p			p, np			p	p,np		
IW-15			p			p, np			p	p,np		
IW-16			p			p, np			p	p,np		
IW-17			p			p, np			p	p,np		
IW-18			p			p, np			p	p,np		
IW-19			p			p, np			p	p,np		
IW-20			p			p, np			p	p,np		
IW-21			p			p, np			p	p,np		
IW-22			p			p, np			p	p,np		
IW-23			p			p, np			p	p,np		
IW-24			p			p, np			p	p,np		

Notes:

p: Water Level - taken under pumping coditions

np: Water Level - taken under non-pumping conditions